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China Report

AGRICULTURE



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DEVELOPING SOCIALIST AGRICULTURE

HKO60741 Beijing HONGQI in Chinese No 19, 1 Oct 84 pp 29-34

[Article by He Kang [0149 1660]: "Build Modern Socialist Agriculture With Chinese Characteristics"]

[Text]

The Great People's Republic of China has already seen 35 years of glorious history. Over these 35 years, under the leadership of the CPC, China's agriculture has achieved enormous successes and this has been noted throughout the world.

I

In 1983 the gross national agricultural production value was 312.1 billion yuan, a four-fold increase over 1949 (calculated on the basis of comparable prices) and this represents an average annual increase of some 4.8 percent, a higher speed of increase than the world average during the same period. Total grain output reached 387.28 million tons, an increase of 2.4 times over 1949. In the case of cotton and oil crops, output reached 4.637 million tons and 10.55 million tons respectively, increases of 9.4 times and 3.1 times over 1949. The output of other economic crops, such as sugar, tea, fruit, varieties of hemp, and tobacco also increased by several times or several [word indistinct] of times. The forest cover rate has also increased, from 8.6 percent since the early years after liberation to 12 percent. Afforested cultivable land stood at some 13 million hectares. Gross output of pork, beef, and mutton reached 14.02 million tons, an increase of 5.4 times over 1949. Output of aquatic products reached 5.46 million tons, an increase of 11.1 times over 1949, of which output in fresh-water breeding already occupies a dominant world position. Rural and small-town industry has developed [words indistinct] output value has reached some 75.71 billion yuan, making up one-ninth of the gross industrial output value in China and thus transforming it into a major pillar in the rural economy.

The development of the rural economy has resulted in a large increase in the income of the peasants and there have been clear improvements in the standard of their material and cultural lives. According to random investigations carried out on a national scale, the average annual per-capita net income among the rural population in 1983 was 310 yuan, an increase of 1.3 times over 1978. Peasants' food, conditions related to consumption of goods,

clothing, and living conditions have all markedly improved. Some regions and some peasants have got rich first as a result of hard work. Television sets, tape recorders, washing machines, and other durable consumer items are all gradually entering peasant households. [Words indistinct], once the problems of having enough to eat have been solved, some of the peasants have begun to develop toward standards of living of comparative comfort.

The above facts illustrate that China's agriculture is entering a new period of development.

The transformation from a self-sufficient and semiself-sufficient economy to large-scale commodity production is an important indication of China's agriculture's entry into [words indistinct] products reached 126.5 billion yuan, and after taking into account factors relating to price changes, this represents an increase of 53.5 percent over 1978, and an average annual increase of 9 percent. The commodity rate of agricultural by-products has increased from 35.6 percent in 1978 to 40.5 percent. There have been large-scale increases in the commodity rates of grain, cotton, meat, oils, eggs, poultry, aquatic products, sugar tea, hemp, fruit, tobacco, and silkworms. As rural commodity production has developed, the peasants' purchasing power, in terms of industrial products, has also clearly increased. In 1983 commodity retail sales in the countryside reached 167 billion yuan, an increase of 85.96 billion yuan over 1978, making up 66 percent of commodity retail sales increases during the same period. This has effectively promoted the development of industry and of the entire national economy.

The transformation from traditional agriculture to modernized agriculture is another important indication of the entry of Chinese agriculture into a new period of develorment. Over the last 30-odd years an enormous amount of work has been done in the basic construction of China's agriculture and considerable achievements have been made. In 1983 the amount of efficiently irrigated land throughout the entire country totaled some 44.64 million hectares, an increase of 1.2 times over 1952. Gross mechanical power in the rural areas has increased from 250,000 horsepower in 1952 to 245.03 million horsepower in 1983, and in 1983 there were 841,000 large and medium-sized tractors, 2.75 million small and walking tractors, and 275,000 rural heavyduty trucks in use, and 34.1 percent of all cultivable land was machinecultivated. Grain, cotton, and oil processing has achieved mechanization or semimechanization. Rural electricity reached 43.52 billion kilowatt-hours, an increase of some 800 times over the 50 million kilowatt-hours of 1952. Total fertilizer usage (calculated according to effective proportions) increased from 78,000 tons in 1952 to 16.598 million tons. In addition, there have also been considerable successes in agricultural scientific research, education, and technological propagation and this has established important conditions for promoting the shift from traditional agriculture to modernized agriculture.

The emergence of these two shifts in Chinese agriculture presages major developments in the rural productive forces in the future.

The achievements made over the last 30-odd years in Chinese agriculture amply illustrate that the socialist system has a strong vitality and that only Chrough socialism can the Chinese peasants shake off poverty and take the road to prosperity. However, since we lacked sufficient experience, we made serious errors in our work and the road we have taken has been a tortuous one. From 1949 to 1957 Chinese agriculture experienced a period of smooth restoration and development. After the completion of the land reform, the party and the government lost no time in leading the peasants along the road to mutual help and cooperation and thus successfully completed the socialist transformation of the small peasant economy, and this in turn promoted a restoration and development of the rural productive forces. During this period the annual average increase in gross agricultural output was 8 percent. From 1958 to 1965 Chinese agriculture saw a period of serious distortions, followed once again by restoration and development. As a result of "leftist" errors, the inappropriate initiation of the "Great Leap Forward" and the movement to set up people's communes, and natural disasters at the time, the rural economy suffered seriously. It was only in 1965, as a result of readjustments, that there was a gradual restoration and development in agriculture. During this period the annual average increase in gross agricultural output value was only 1.2 percent. From 1966 to 1976 was the period of the "Cultural Revolution, "and thus agricultural development, which had only just resumed in 1965, was once again struck hard. Only thanks to the resistance of the masses and the cadres against Lin Biao's and the gang of four's attempts to go against historical trends and resistance against movements such as "in agriculture, learn from Dazhai," as well as increases in the usage of fertilizers, pesticides, farm machinery, and electricity in the rural areas, and capital construction in irrigation, was Chinese agriculture able to maintain a certain amount of development. In 1977 and 1978, after the smashing of the gang of four, there were some improvements in the rural economy, but since the influence of "leftism" had not been eradicated, agricultural development did not reach the levels it should have done. The 3d Plenary Scssion of the 11th CPC Central Committee meant that Chinese agricultural development began a historic about-turn. From 1979 to 1983 the average annual increase in gross agricultural output value was 7.9 percent, far exceeding any of the averages during the previous 30 years, and thus a new and unprecedented situation emerged in Chinese agriculture.

Why have there been such tremendous achievements in Chinese agriculture since the 3d Plenary Session of the 11th Central Committee? The basic reason lies in the party Central Committee's maintenance of the ideological line of seeking truth from facts and the correction of former "leftist" errors in the guiding ideology in agriculture. In addition, work was aimed at developing the rural productive forces and a series of measures were adopted to relax rural economic policies, develop rural commodity production, and enliven the rural economy. These measures mainly included: comprehensive implementation of diversified forms of contracted responsibilities systems with payment linked to output, centered around household contracts; restoration and expansion of management autonomy for rural cooperative economic groups,

readjustments to the rural industrial structure, with measures suited to local conditions; large-scale increases in the purchase prices of agricultural sideline products, active clearing of rural channels of circulation; large-scale strengthening of agricultural technological reforms; allowing some regions and some peasants to get rich first, and so on. All of these readjustment and reform measures proved themselves effective and they successfully eradicated certain obstacles in some of the links in rural production relations and in the deployment of the productive forces and this greatly promoted the development of the rural productive forces.

The tortuous road of development in Chinese agriculture has meant that in our investigations we have come to understand that: Whenever any guiding ideology, line, principle, or policy for agriculture corresponds with the objective reality of the rural areas and the demands of the peasants, rural economic construction will move forward and develop, otherwise there will be stagnation or even regression. According to the practice of the last 35 years, and in particular the last 5 years, we should absorb and note well the following important experiences and lessons: 1) As far as guiding ideology in the development of the rural economy is concerned, we must eradicate "leftist" intervention and the fetters of small-producer habits and trends, further emancipate our thinking, seek truth from facts, and carry out active and stable economic readjustments and reforms in many different areas, constantly opening up and developing a new situation in agriculture. 2) Readjustments and changes to the production relations must correspond to the level of development of the productive forces. The basic aim of socialist revolution and construction is to massively develop the social productive forces and to satisfy to the greatest possible extent the constantly increasing material and cultural needs of the people. Any aspects of the existing production relations which are not beneficial to the development of the productive forces must be readjusted and reformed, so that there is constant perfection and so that the social productive forces will develop. 3) The commodity economy still exists in a socialist society. We must without fail uphold the principle of the planned economy as central and regulation by the market mechanism as secondary, and make conscious use of the law of value and economic levers, developing agricultural commodity production on a large scale. 4) The development of rural commodity production requires a corresponding and suitable industrial structure and industrial policies. We must thoroughly implement the principle of "not letting up on grain production and actively developing diversified management," and, on the basis of natural laws, suiting policies to local conditions, and organizing a rational distribution of agricultural production, we must ensure comprehensive development of agriculture, forestry, fishery, and animal husbandry, as well as rural industrial sideline industries. We must implement economic integration between the urban and rural areas and move toward specialization and socialization. 5) A powerful material and technological foundation is a necessary precondition for socialist modernized agriculture. We must uphold the principle of making agriculture the foundation and we must strengthen industrial support of agriculture, implementing agricultural technological reforms on a large scale and constantly improving the level of the rural productive forces. 6) Labor represents the most lively factor in the productive forces and thus

the peasants must be handled correctly. At their present stage, the Chinese peasants have now become new-style socialist peasants. In drawing up and implementing all rural economic policies, we must respect the autonomy of the cooperative economic groups and the peasants and we must handle correctly the interests of the state, the collective, and the individual, and ensure that the masses of peasants quickly get rich on the basis of developing production.

The experiences of agricultural development in China, when summarized, are that we must start out from the reality of China, we must uphold reforms, and we must construct a socialist modernized agriculture with Chinese characteristics. A socialist modernized agriculture with Chinese characteristics must first of all be basically characterized by a socialist economy. and this means upholding the principle of public ownership of the basic means of production and the principles of distribution according to labor and planned guidance. Second, this kind of agriculture must have the general characteristics of modernized agriculture throughout the rest of the world, in other words it must make extensive use of modern science and technology, the means of production offered by modern industry, and scientific methods of management. Third, this socialist agriculture must have specifically Chinese characteristics. These are mainly the implementation of integrated unified and decentralized management, the coordinated development of planting, breeding, and processing, and comprehensive agricultural, commercial, and industrial management, as far as the industrial structure of agriculture is concerned. As far as the planning system is concerned, the planned economy must be central and regulation by the market mechanism secondary. As far as technological reforms are concerned, we must make full use of all agricultural natural resources and we must focus on raising per-unit yield and product quality, while also implementing intensive management, and so on. Over recent years the readjustments and reforms carried out in China's agriculture have in actual fact been the first glorious attempt to construct a socialist modernized agriculture with Chinese characteristics.

III

According to the strategic targets of the 12th CPC National Congress, initial plans are that gross national agricultural production value should be increased by 180 percent by the end of this century. If rural and small-town enterprises are included and we strive to quadruple output, that means an increase of 300 percent. By the year 2,000, gross national grain output will reach about 500 million tons and the average per-capita net income of peasants will be around 800 yuan, while we will make efforts to get it as high as 1,000 yuan or more. This is an enormous and arduous strategy. Thus reforms must revolve around quadrupling and making the peasants rich, so that the reforms promote quadrupling and prosperity among the peasants, and in these reforms we must seek and construct a socialist modernized agriculture with Chinese characteristics.

1. We must continue to implement reforms in the style of management and we must develop the rural cooperative economy. One of the major reasons for the speedy development of agriculture over the last few years has been the implementation of reforms in the management style of the rural cooperative economy and, as a result of universal implementation of diversified forms of the system of contracted responsibilities with payment linked to output, we have solved the problem of eating from the "same big pot," and thus developmental vitality has been instilled into the rural economy.

Today the system of contracted responsibilities with payment linked to output which concentrates on household contracts has become the major form of management in the rural cooperative economy. In the future the focus should be shifted to stabilizing, perfecting, and continuing propagation of the system of contracted responsibilities with payment linked to output. This stabilizing requires the adoption of suitable measures such as extending land contract periods and reasonable compensation for investments in land. It also means eliminating factors which are not beneficial to the stabilization of the system of contracted responsibilities, encouraging the peasants to increase their investments, implementing intensive management, encouraging a gradual movement toward concentrated expertise in planting the land, and the development of suitable scales of management. Perfecting involves mainly working in accordance with the principle of integration of centralization and decentralization, developing a multilevel, diversified pre-, mid-, and postproduction service system, and strengthening the mechanism of unified management. Propagating means not only implementing the system of contracted responsibilities in areas such as planting but also introducing the system into all other areas and actively propagating the system of contracted responsibilities with payment linked to output or the system of management contracted responsibilities. Naturally the concrete form of responsibility system cannot be identical everywhere. State-run agricultural enterprises should also actively promote household (fishery and animal husbandry) farms, while upholding the system of public ownership of the basic means of production, and thus they should gradually develop two-tiered management, involving an integration of unity and decentralization, and as a result more effectively give expression to the superiority of the publicly owned economy and the enthusiasm of working individuals.

At the same time as stabilizing, perfecting, and propagating the system of contracted responsibilities with payment linked to output we must develop diversified forms of rural cooperative economy according to circumstances. Generally speaking, regional cooperative economic groups based on public ownership of land should be set up as quickly as possible. Diversified forms of specialized cooperative economic groups centered around specialized contracts and specialized joint ventures must all strictly adhere to the desires of the peasants and, on this basis, develop gradually. The form of these cooperative economies, their content, and the extent to which the means of production within them are publicly owned can vary according to circumstances, so that each one may retain its own individual characteristics. Whatever this form of cooperation it must involve voluntary participation and mutual

benefits, it must accept the guidance of state planning, and it must implement democratic management and uphold the principles of distribution according to labor, shared retention, and accumulation, and as long as they fulfill these requirements, they are cooperative economies of a socialist nature. Just as Comrade Hu Yaobang said in his report to the 12th CPC National Congress, "We must promote diversified forms of economic combinations which truly adhere to the principles of benefiting production and of voluntary participation and mutual benefit. It can be predicted that in the not too distant future prosperous trends will develop in China's countryside in which measures are suited to local conditions, in which measures for advanced production may be implemented on a large scale, and in which a diversified and more perfect cooperative economy will develop."

2. We must carry out far-reaching reforms in the industrial structure and ensure comprehensive development of the rural economy. Over the last few years another important experience in rural economic development in China has been the gradual readjustments and reforms in the industrial structure and the implementation of comprehensive agricultural, industrial, and commercial management. The result has been that unitary management and an irrational structure, which for so long characterized Chinese agriculture, has gradually begun to change and improve. However, the various natural and economic resources in the countryside are still not being fully and rationally used, and development among various industries and regions is very unbalanced, while the structure inside various industries is also rather irrational. Thus, we must continue to carry out far-reaching readjustments and reforms in the structure of rural industries.

There must be major shifts in our guiding ideology in order that readjustments and reforms in the structure of rural industries can be smoothly implemented. We need new ideology, new concepts, and new methods. Recently, while on an investigation tour of eight counties in Hebei Province, Comrade Hu Yaobang said that rural production must at the very least involve eight things, namely planting, breeding, mining, processing, commercial services, transportation, small-scale energy construction, and building. The many industries included within rural industries can be divided into three levels, one the level of planting, the second the level of agriculture, forestry, fishery, animal husbandry, and sideline industries, and the third the level of rural economy. All levels must strictly adhere to natural laws and economic laws and must pay attention to suiting measures to local conditions, comprehensive utilization, ecological balance, and a benign cycle.

At the planting level we must ensure that equal attention is giving to grain crops, economic crops, and fodder crops. We must maintain a definite level of steady growth in grain production. Economic crops must develop in a planned way, and correspond to market demand and consumer demand, and in all cases product varieties and quality must be improved while output is increased. The planting area of fodder crops must be gradually increased and it must make up a definite proportion of all planting areas.

At the level of agriculture, forestry, fishery, sideline industries, and animal husbandry there should be full and rational utilization of all natural resources, and forestry, fishery, and animal husbandry must be developed more quickly. The departments of agriculture, animal husbandry, and fishery must actively coordinate with the forestry departments and mass tree-planting activities should be maintained to protect and expand tree coverage and cultivable land. In some areas a low level of grain surplus has begun to develop, but in general, the level of China's grain consumption is still fairly low, while the breeding industry is still very weak and we must pay particular attention to shifting grain toward fodder. In areas where conditions allow it, fodder crops should be developed and grazing grass should be planted, the breeding industry should be developed quickly, and output of meat, milk, eggs, and fish should be increased as quickly as possible, and thus the eating habits of the people may be improved. The internal structure of the animal husbandry industry also requires adjustments and we must pay attention to develop low fat, high protein animal food products such as beef, mutton, rabbit, and poultry. In the fishing industry the emphasis should be on developing fresh-water and marine breeding by organizing the state, collectives, and individuals working together and we should, as quickly as possible, change the situation in urban areas in which it is difficult to get fish to eat.

At the level of the rural economy we should implement an integration of urban and rural economies and composite development of agriculture, industry, and commerce. Without agriculture there can be no stability, without industry no prosperity, and without commerce no enlivening, and thus we must place equal emphasis on all three. We must fundamentally change the situation in which peasants only carry out agricultural work and must change it as quickly as possible and, instead of only supplying grain and raw materials, they should at the same time carry out agriculture, industry, commerce, building, transportation, service industries, and so on. At present small town and rural enterprises must develop the fodder industry and food industry in particular and gradually make use of modernized processing equipment and in this way improve the depth of processing and its economic results. We must pay attention to altering the "bureaucratic" handling of the peasants' interests, and thus ensure that small town and rural enterprises really are economic bodies run by the peasants. We must actively support peasant household enterprises and joint household enterprises. Communications and transportation represent an important factor in the development of the rural economy and in regions where conditions allow it we can carry out projects run by the people and subsidized by the state, thus gradually developing rural roads and water transportation. On the basis of comprehensive development of the rural economy, we must speed up construction of small towns so that they become the political, economic, and cultural centers of the countryside and form the basis of a network of urban and rural links.

3. We must continue reforms in the circulation system and management system and we must develop rural commodity production. China's rural economy is a commodity economy under the guidance of state planning and the economic system which it demands should be characterized by flexibility and adaptability.

Many aspects of China's rural circulation system and management system still do not correspond with the demands of commodity economic development and thus further reforms are necessary. In our reforms we must organically integrate the development of the commodity economy with state planning guidance and gradually build up a lively and rich system.

Macroeconomically we must exercise control and microeconomically we must enliven things. This is an important principle in guiding reforms in the economic system. Today in China it is still necessary for the state to issue certain directives concerning the unified purchase or batch purchase of grain, cotton, oils, fresh pork, tobacco, and other important agricultural sideline products, since this helps guarantee the basic requirements of the people's lives as well as coordinated development of the national economy. As rural commodity production develops we should in future gradually expand the proportion of guidance plans and market adjustments and make adjustments mainly by means of the market mechanism and economic levers, making greater use of such economic levers as prices, taxation, credit, interest rates, and economic contracts. At present we should concentrate on smoothing out price relations and getting rid of obstacles created as a result of irrational price relations which hinder the development of rural commodity production. There are still many problems within the rural commodity circulation system and we should continue to smooth out the various channels of commodity circulation, expanding commodity exchange between urban and rural areas and between different regions. We should encourage the peasants to go into towns and cities and open up shops to sell agricultural sideline products and thus solve problems, such as difficulties in buying and selling, which exist within the development of rural commodity production, and at the same time enliven both urban and rural economies. In supply and marketing cooperatives we should continue to simplify administration and expand powers and work more toward enlivening the rural economy and supporting commodity production and in doing so ensure that cooperative commercial organizations are established which are truly run by the peasants. Rural credit centers should also continue to improve in this direction.

We must pay attention to the problem of consumption and actively open up agricultural sideline products sales markets and similar markets for other processed goods. Like production, exchange, and distribution, consumption also represents an important link in economic development. Without a lively and constantly increasing sales market, rural commodity production cannot reach rapid and sustained development. At present we should encourage the mass of city dwellers to change from being low-level consumers to being high-level consumers and we must research and solve the various problems hindering this shift. Retail sales of rural consumer products represents more than half of all national retail sales of consumer products and thus we should work hard to open up even further this market, which has such an enormous potential. Not only must we guide production, exchange, and distribution, we must also guide consumption, so that consumption promotes the development of rural commodity production.

One of the most important parts of the reforms in the rural management system is to ensure as fast a shift as possible in all levels of agricultural, animal husbandry, and fishing departments toward a path more suited to the development of commodity production. In addition, we should change the former situation, in which for many years only production was attended to and circulation was ignored. We should shift from pure administrative management to a service-oriented system and we should coordinate relevant departments to actively organize a variety of services for the peasants prior to, during, and after production. We should also implement technology, information, and policy guidance and thus promote the development of agriculture toward specialization, socialization, and intensivization.

4. We must speed up implementation of agricultural technological reforms and constantly improve economic results. At present agricultural production in China depends mainly on manual operation and the ability to handle and combat natural disasters is not high and falls far short of the demands of socialist modernized agriculture. Speeding up agricultural technological reforms, improving conditions for agricultural production, and improving the standard of agricultural science and technology is still an urgent and arduous task facing us today.

In implementing agricultural technological reforms we must also pay attention to improving economic results. We cannot simply copy indiscriminately all advanced foreign technology and equipment, rather we should import selectively on the basis of differing characteristics in different areas in China and according to varying requirements and capabilities. As far as the country as a whole is concerned, mechanization, semimechanization, and manual tools should all be given equal importance, and manpower, animal power, and electrical power should also all be used together. We should integrate engineering and biological measures and we should integrate modern science and technology and good traditional technology. As far as each individual region and work unit is concerned, we should start from reality and make selective use of the most urgently required technology and equipment and thereby achieve the best economic results. China has a large population and little cultivable land and it lacks energy resources, and thus it must make full use of mountain areas, plains, river valleys, and all natural resources, and we must pay attention to improving per-unit yield. This, then, should be the starting point for agricultural technological reforms. Through these technological reforms we should strive for using rather small amounts of land and suitable investments, and obtaining the greatest possible yields. We must pay attention to agricultural education, scientific research, and the propagation of technology, and we must step up the development and utilization of trained personnel and technology itself. At the same time as developing education in colleges and universities, we should also make great efforts to develop vocational training for peasants and the training of peasant cadres. We must encourage agricultural technological pesonnel to circulate among the border regions and the grass roots, and thus improve the scientific and technological standards and management standards of all the agricultural ranks.

In order to improve economic results in agricultural technological reforms, we must also carry out reforms in the methods of capital construction investments in agriculture. All projects which have repayment capabilities must practice the system of repayable loans, so as to encourage those who use the funds to concern themselves with the results of their investments. At the same time we must overcome the tendency to solely rely on state investments and we should adopt methods which together the state, the collective, and the individual and which involve an integration of domestic and overseas funds and in this way alleviate and solve the problems of insufficient funds, thus guaranteeing the smooth implementation of agricultural technological reforms.

CSO: 4007/60

UTILIZATION OF AGRICULTURAL SIDELINE PRODUCTS SURVEYED

Beijing JINGJI DIAOCHA [ECONOMIC SURVEY] in Chinese No 2, 1984 pp 80-84

[Article by Zhang Decai [1728 1795 2088] of the investigation and study office of the Central Office of the Anhui Provincial People's Government: "A Survey of Processing and Utilization of Agricultural Sideline Products in Anhui Province"]

[Text] Anhui Province is situated in the lower reaches of the Chang Jiang. The Chang Jiang and the Huai He traverse the region, the climate is mild, rainfall is abundant, and there is a variety of terrain. All these factors are favorable to developing the production of diverse agricultural, livestock, special and native products, and to developing the processing industry for agricultural sideline products. However, the superiority of these resources is far from being brought into play. An important strategic task in the economic development of our province in the future will be to transform the superiority of our resources into an economic superiority.

I. A Prominent Contradiction in the Economic Development of Anhui Is the Failure to Effectively Transform the Superiority of Our Resources in Agricultural Sideline Products Into an Economic Superiority.

Anhui Province has 66,617,000 mu of farmland, 250,000 mu of mulberry fields, 1.5 million mu of tea plantations, 400,000 mu of orchards, 53.66 million mu of forests, 18 million mu of clear water surface, 8 million mu of grassland and pastures, as well as 1.39 million mu of uncultivated land which can be used for agriculture and 20.81 million mu of wasteland which can be used for afforestation. We have abundant resources in agricultural sideline products of all varieties, some of which have occupied important positions throughout the country. In 1981, grain output for the whole province was 35,748,000,000 jin, sixth in the country. The net amount allocated to other places through price parities and negotiated prices was 1.85 billion jin, second in the country. Cotton output was 31.28 billion dan, seventh in the country; oil bearing crops were 19,868,000 dan, second in the country; hemp products were 4,815,000 dan, first in the country; silkworm cocoon totaled 92,000 dan, ninth in the country; tea leaves were 745,000 dan, third in the country; and cured tobacco totaled 1,718,600 dan, fifth in the country. The procurement of down totaled roughly 9 million jin, first in the country both quantitatively and qualitatively. The procurement of goat skin totaled some

3 million sheets, fourth in the country. The procurement of bristles totaled some 3 million jin, fifth in the country, and so on and so forth. The above indicates that our province enjoys a definite superiority of resources in agricultural sideline products.

There is already a definite basis for the processing industry which uses agricultural sideline products as raw materials. Calculated from the constant prices of 1970, the gross value of industrial output in our province for 1981 was 12,869,000,000 yuan. Of this, the output value of the processing industry using agricultural sideline products as raw materials totaled 5,887,000,000 yuan, constituting 43.4 percent of the total. Even under the present circumstance when the level of processing is relatively low, the processing industry involving agricultural sideline products has already occupied an important position in the economy of our province.

Agricultural sideline products and processed products are the important items in our province's foreign trade export. In 1981, the gross amount of foreign trade procurement was 810,000,000 yuan. The amount of procurement for agricultural sideline products and processed products was 740,000,000 yuan, 91.35 percent of the total, and the primary source of foreign exchange for our province.

However, at present, in the processing and utilization of agricultural sideline products in our province, only cigarettes, tea leaves and white wine are relatively good. In 1981, we produced 1,243,700 boxes of cigarettes, third in the country, with an output value of 636,000,000 yuan (according to the constant price of 1970). We created 410,000,000 yuan in profits and taxes, constituting 20 percent of the provincial financial revenue. We produced 163,300 tons of drinking wine, 138,700 tons of which were white wine and a hard liquor made from yeast, first in the country, with an output value of 286,000,000 yuan, and 104,000,000 yuan in profits and taxes. Tea leaves procurement totaled 660,000 dan, 486,500 dan of which underwent industrial processing, with an output value of 101,000,000 yuan and 49,000,000 yuan in industrial and commercial taxes. The profits and taxes from cigarettes, wine and tea were the three main pillars of the financial revenue of our province. In addition to cigarettes, wine and tea, there were other sources of agricultural sideline products in our province which failed to be transformed into economic superiorities through processing and comprehensive utilization. This was manifested in the following aspects:

1. Some agricultural sideline products which historically enjoyed superiority have either lost or are losing their superior position. For instance, the Mingguang green bean is a special product of our province and enjoys a reputation historically. We exported 5,000 tons in 1920. Now, due to the degeneration of variety and the lowering of quality, output has become smaller and smaller. Export has stopped for years. In the past, the large Chenzhai soy bean of Mengcheng County enjoyed high reputation on the Hong Kong market. Now, due to such reasons as the degeneration of quality, we cannot export the product. However, after we have imported soy bean from Henan Province and after artificial cultivation, we exported over

200 tons every year. Our province has the finest quality loquat and jujube. The "Santan loquat" and "Huizhou jujube" are the most popular goods on the markets in Hong Kong and Macau. However, we have failed to develop them as key products. As a result, the producing areas are scattered, the quantity is too small and the quality had degenerated. Thus, the superior factors are not obvious. Now, in a year of bumper harvest, we can gather 3 million jin of loquat. In 1982, we only exported 100,000 jin of fresh loquat. In 1959, we exported 1.22 million jin of jujube. In 1981, we only exported 600,000 jin. On the other hand, Jiangsu and Zhejiang have attached great importance to the artificial cultivation of loquat and jujube, the quality of which is almost comparable to that of our province. If we do not emphasize this aspect, we will also lose the superiority which we are enjoying at present.

2. Some agricultural sideline products should have become superiorities through processing and utilization. However, because we have missed our opportunities, they have failed to become economic superiorities. For instance, our province has a relatively large quantity of sweet potatoes and has taken a relatively early step in comprehensive utilization. This product should be a major economic superiority in our province. However, because of the failure to emphasize what should be emphasized, of backward processing technology, poor business management, high cost, low results, and slow development, very little is put to industrial use at this point, and we have already lagged behind our fraternal provinces and municipalities. In 1981, the gross output of sweet potatoes in our province was 4.47 billion jin. The amount of commodity availability totaled 2.5 billion jin. but only 1.1 billion iin was used in industry, yielding an output value of 390 million yuan, which constituted 3.2 percent of the gross value of industrial output. We realized 110 million yuan in profits and taxes. Of the above, we only exported 1,500 tons of citric acid. On the other hand, Jiangsu Province was importing dried sweet potatoes from our province. Its industry also developed later our province. In 1981, it exported 5,000 tons of citric acid, more than 3 times that of our province. Our province's down occupied first position both in quality and quantity and enjoyed a good reputation on the international market. The Tianhe Down Factory in Wuhu was the first to be built. It has been in operation for some 20 to 30 years. Today it is still basically exporting finished down, and is just beginning to export manufactured down products. The economic results and funds are low. On the other hand, after learning from our province in 1973, the Guilin Down Factory in Guangxi developed very rapidly. Its present profits have already totaled 1.7 million yuan, some 800,000 yuan more than our province, and almost doubled that of our province. Our province has abundant raw materials for the capning industry. We have water chestnut, asparagus, green bean, tomato, mushroom, all kinds of fruit, pork and mutton. However, the gross output of cans in our province only totaled 15,000 tons. For instance, the raw material of water chestnut is sufficient for 5,000 tons of cans. Presently, we only produce some 1,000 tons. The rational collection of bamboos can yield around 5,000 tons of cans. Presently, none has been used for canning. We produce 45 million jin of mutton every year. Yet, the output of canned mutton only totals 700 tons.

Our province and Fujian Province began to can mushrooms almost around the same time. Presently, our province only produces 800 tons annually, while Fujian Province has four factories specializing in canning 10,000 tons of mushrooms, giving an annual output of 60,000 tons. For just this item alone, it has far surpassed the gross output of cans of our province.

3. We have failed to develop those processing industries involving agricultural sideline products which should be developed. For instance, our province has abundant resources for the processing of grain, oilbearing products, food products and feed in our province, the comprehensive utilization of pig products, soy bean and timber, as well as jade and bamboo furniture, arts and crafts, spun hemp, spun wool, reeled silk, wood pulp, essences and spices. Although they may not definitely form certain kinds of superiority, yet, in light of the market situation, whatever can develop should be developed. Due to the failure to attach sufficient importance to this, development has been slow and results have been very poor. Take arts and crafts as an example. In 1980, the output value for the whole country was 3.6 billion yuan. Our province only had 15 million yuan, constituting only 0.4 percent of that of the entire country. In children's food industry, our province was second to last in the country, and the last in Eastern China. Our province has abundant feed resources. While we do not produce fish meal, we have a more abundant supply of other raw materials. The whole province has 480 million jin of award-winning feed of all kinds. The communes and production brigades supply 520 million jin of feed, the peasants retain for their own use I billion jin of feed. We have 2 billion jin of cakes of all kinds of rice dregs. Huaibei produces an abundance of corn, dried sweet potato, bran, green manure, corn stalk, sweet potato vine, pine needle power, meal made from animal blood and bone meal, all of which have provided outstanding factors for developing the feed industry. Althour our province's feed industry began at a relatively early date, it developed slowly with backward technology. Up till now, we are still primarily producing machine-manufactured all-bran coarse feed, with very poor economic results which also affect the development of livestock breeding and the aquatic business. Timber is material in short supply with very great potential for comprehensive utilization. The rate of utilization of our province's timber was generally roughly 50 percent. We have not rationally utilized most of the remaining odds and ends. With the exception of some 100,000 cubic meters of twigs gathered from the mountainous districts every year, the lumber yards at and above county level throughout the province consume 35,000 cubic meters of timber a year, which means that there are 158,000 cubic meters of odds and ends which can be utilized to manufacture 80,000 cubic meters of plywood. However, in 1981, we only processed 14,700 cubic meters of plywood. Comprehensive utilization not only can raise the rate of timber utilization by a wide margin, but can also enable economic results to double and redouble. For instance, in the furniture business, through comprehensive utilization, Shanghai can create 1,100 yuan in value with every cubic meter of timber, while our province can only create around 500 yuan in value, the difference of 100 percent. In 1981, our province's furniture company created some

48 million yuan in output value. If we do a good job of comprehensive utilization, we can quadruple our output value and reach almost 100 million yuan.

- 4. We have failed to develop and utilize a large amount of wild vegetable resources. According to a study in 1959, our province had 99 wild carbohydrate resources totaling some 200 million jin; 189 wild-bearing resources (including aromatic oil), totaling some 20 billion jin; some 50 wild chemical industrial resources totaling some 2.4 million dan; and 158 wild fiber resources totaling 9.3 million dan. Since that time, these resources have been seriously undermined. Till this day, we have not conducted a survey on these resources. Consequently, we have failed to develop and utilize most of them. The yangtao, which enjoys the reputation of king of the fruits abroad, is very high in nutritional value. After importing from our country, New Zealand has carried out artificial cultivation and improvement, and has formulated a yangtao economy. The Dabie Mountainous Region and the Southern Anhui Mountainous Region in our province have abundant yangtao resources. Presently, our annual output is roughly million jin. However, not having developed this superiority, we have allowed it to flourish and perish and presently are utilizing only onefourth of the resources.
- 5. We have failed to fully develop and utilize large areas of water surface, grassland, deserted mountains and wasteland. Our province has 18 million mu of clear water surface, 0.37 mu per capita, 42 percent higher than the 0.26 mu per capita nationally. We are fourth in the country in this regard. Of this, 8 million mu of water surface can be used for breeding fish, and 3 million mu of which are ponds, with fine water quality, abundant feed and appropriate temperature. Qualitatively speaking, ours is an important clear water fish province in our country. However, we have failed to fully utilize such fine waters. Our rate of utilization of water surface and our average per-unit output are both lower than the average level nationally. In 1981, we produced 158.86 million jin of fish, which was 3.2 jin per capita, much lower than the 9.3 jin per capital nationally and the 14.7 jin per capita in Jiangsu. Furthermore, we have 8 million mu of grassland, 20.81 million mu of deserted mountainous suitable for afforestation, and 1.39 million mu of wasteland suitable for agriculture which we have failed to develop and utilize to the full.
- II. A Strategic Task Which Does Not Permit Delay Is To Transform the Superiority of Our Resources in Agricultural Sideline Products Into An Economic Superiority.

Since the Third Plenary Session, major changes have taken place in the agricultural economy of our province. Agricultural commodity economy has developed to a certain extent and the commodity rate of agricultural sideline products has improved considerably. However, due to inadequate industrial processing and utilization and unsmooth channels of circulation, a situation of difficulty in the sales of agricultural sideline products has appeared on a general scale. Therefore, we must launch pre-production

and post-production service work well, try our best to open up channels of circulation, develop the processing industry, open up prospects for resources in agricultural sideline products, and increase their value through processing. Otherwise, the further development of our province's agricultural economy will be seriously affected, and the realization of the strategic goal of quadrupling our province's gross value of industrial and agricultural output by the end of this century will inevitably be affected also.

There is a wide prospect for the development in the processing of agricultural sideline products in our province. We must revolve around agriculture in running industry, revolve around the superiority of our resources in agriculture sideline products in developing the economy, and formulate characteristics of economic development in our province. Our province has a relatively weak industrial basis. Although agriculture enjoys superiority, its great potential still awaits to be tapped. Calculating from the constance prices of 1970, the gross value of industrial output for the whole country in 1980 constituted 75.4 percent of the gross value of industrial and agricultural output, which was three times that of the gross value of agricultural output. The gross value of industrial output for our province, however, only constituted 64.7 percent of the gross value of industrial and agricultural output, which was 1.8 times that of the gross value of agricultural output. Compared to the average level nationally, a wide gap still exists. Furthermore, in the composition of the gross value of industrial output in our province, the output value of the processing industry using agricultural sideline products as raw materials constituted 43.4 percent, embodying a definite basis for development. In the composition of the gross value of agricultural output, the output value of crop-growing in the agriculture throughout the country dropped from 83.1 percent in 1952 to 67.8 percent in 1978, while the output value of forestry, livestock bredding, sideline occupation and fishery rose from 16.9 percent to 32.2 percent. Inversely, our province's crop-growing rose from 70.1 percent to 76.61 percent, while forestry, livestock breeding, sideline occupation and fishery dropped from 29.9 percent to 23.39 percent. Compared to the whole country, this was a reverse trend. This reflected the fact that our province's agricultural structure was still not rational enough, and that the situation for the development of forestry, livestock breeding, sideline occupation and fishery still lagged behind the average national level, and failed to coordinate with the development of crop-growing. This situation indicated that our province should develop forestry, livestock breeding, sideline occupation and fishery on a larger scale in the next few years so as to provide more raw materials for the processing of agricultural sideline products and accelerate the speed of development of the processing industry involving agricultural sideline products. Inversely, the development of the processing industry involving agricultural sideline products will promote the overall development of agriculture and enable the internal structure of agriculture to become more rational.

We must bring into full play the superiority of our province's resources in agricultural sideline products, and transform this superiority into an

economic superiority, which will form the characteristic of our province's economic development. Our foremost task is to strengthen investigation and study, truly clarify where our province's superiority lies and what our direction of attack is, and formulate therefrom a strategy for an economic development in line with our province's realities. At present, the provincial planning committee and scientific and technological committee are organizing forces to conduct technological and economic investigations and scientific and technological forecasts on such topics as the resources and economic superiority of the whole province, the rational development and utilization of the natural resources of the Southern Anhui Mountainous Distrist, the plan to fully utilize the water surface in our province to develop the aquatic business and cotton and relevant technological measures, and the development of the feed industry. The various systems and sectors as well as the various prefectures, municipalities and counties should establish close coordination with one another and link up with their individual realities in organizing leading cadres who are well versed in economics and in the policies, as well as the core professionals and specialists in all areas to conduct all around, systematic and comprehensive investigations and studies on the quantity, distribution, quality, potential for development, prospects for development, communications and transportation and the situation of processing and utilization, the goal of development, market forecasts and problems in circulation involving our province's resources in agricultural sideline products, as well as scientific research, systems of organization and policies. On the basis of knowing and clarifying the situation, we will conduct scientific demonstrations, make policy decisions, formulate policies and measures, properly implement overall balance, emphasize a few key products or projects, concentrate our forces on and cooperate in making breakthroughs, in order to formulate our superiority in processing, popularity in products and support economically.

With the development of the agricultural commodity economy, we must practically and realistically perform our pre-production and post-production service work properly. Thus, we must solve the following issues in regard to our guiding ideology:

1. Start by bringing superiorities into play and develop resources. Our province lacks direction in fostering agricultural sideline products, and basically allows them to develop randomly and blindly. This is manifested as follows: First, the resources are scattered without the formation of a base. There are 24 comprehensive commodity bases throughout the country. Yet, there is none in our province. There are over 90 single-item bases of diverse agricultural sideline, native and special products. Yet there is only one goat skin base in our province, and only recently has a commodity grain base been established. This way, although our resources are plentiful, they are not concentrated, and are also ill-suited for carrying out artificial directional cultivation. Second, we have not undertaken fine strain cultivation of the resources which are degenerating in quality or are poor in quality. Therefore, these resources lack the competitive

ability that will help expand sales. Third, output is unstable, with wide-margin increase and decrease. This affects industrial processing and makes it difficult for the formation of a definite scale of processing. In the future, we should begin by bringing our superiorities into play, strengthen the building of all kinds of bases for agricultural sideline products, select and cultivate fine strains, carry out directional cultivation, strengthen planned guidance and do a good job in maintaining an overall balance.

- 2. Focusing on the superiority of our resources, develop the processing industry. Our province's processing industry has had a definite foundation in using agricultural sideline products as raw materials. However, there is insufficient consideration as to how to focus on the superiority of our resources in developing industry and to view this as a strategic goal in developing our province's economy. Thus, we have failed to develop many processing industries into superiorities, and have also failed to effect long-term development of many processing industries that have potential and prospects. Although we have many setups, we have failed to give prominence to the key setups. In addition, the product structure is irrational. We basically remain bases for supplying raw materials and semifinished products. To change this situation, we should focus on the superiority of our resources in developing the processing industry, place priority on production of light industrial consumer products and the industries that serve them. We should vigorously develop those light industrial products which have a sound foundation and conditions. We must not develop everything indiscriminately. This way, we can promote agricultural development on the one hand and bring along heavy industry on the other. This will be favorable to reviving the machine-building industry, and form agriculture, light industry and heavy industry into one continuous chain.
- 3. Focusing on the superiority of our resources, open up channels of circulation. Currently, there are many problems with the channels of circulation which hinder the development of the superiority of our resources in agricultural sideline products. In meeting the needs of the development of the agricultural commodity economy, we must do well the work in the following aspects of circulation: First, the commercial procurement sector must establish a viewpoint of production, must proceed from the standpoint of supporting production and making things convenient for livelihood, and strive to carry out procurement work properly. It must not scramble for products in short supply and push away unmarketable products. This will result in the inability to procure a large quantity of agricultural sideline products from the mountainous districts and the drainage of a portion of the products. Second, we must open wide the channels of circulation, increase network outlets, vigorously develop rural cooperative commerce and specialized households in procurement and sales, so as to change the present situation in which the sales of agricultural sideline products is a difficult task. Third, we must reduce the intermediate links. Presently, from the basic level procurement outlets to the factory, agricultural

sideline products must generally go through four links. In the numerous turnovers, products are damaged, the quality drops and cost increases, thereby affecting the sales of products. Fourth, the procurement sector must conscientiously implement the price policy and affix prices according to quality, and must not randomly raise grades and prices or lower grades and prices, so that products will not be adulterated and resources will not be drained.

- 4. Beginning by bringing into play the superiority of our resources, reform the system of business management. Currently, the system of business management involving agricultural sideline products is extremely irrational. The procurement of many products is handled by the basic-level supply and marketing cooperatives, business is handled by the foreign trade units, and processing is placed separately under several industrial sectors. Production, supply and sales fail to integrate with one another and the phenomenon in which industry is divorced from commerce is also rather serious. The sectors, regions and the state-run and collective enterprises are separated from one another. They dispute back and forth and vie with one another for resources, processing and profits. As a result, resources are scattered, the processing quality drops and economic losses increase. As a result, we have lost in dispute some objectively existing superiorities which we can bring into play, and have lost them in the midst of the scramble for profit. To change this situation, we must reform the existing system of business management. Focusing on the key products, we should bring the various aspects into a harmonious relationship, and enable agriculture, industry and commerce to develop synchronously and advance side by side. In agriculture, we must launch a comprehensive undertaking involving agriculture, industry and commerce. In industry, we must follow the road of cooperation among specializations. Between industry and commerce, we must develop a relationship of cooperation and joint operation.
- 5. Focusing on bringing the superiority of our resources into play, strengthen scientific and technological development. To transform the superiority of our province's resources in agricultural sideline products into an economic superiority, we currently must strengthen comprehensive scientific and technological development, shatter the boundaries between sectors and systems of ownership, focus on key products, and organize the scientific and technological forces in all respects to cooperate in making breakthroughs in the overall process from the selection and cultivation of fine strains to nurturing, directional cultivation, processing and comprehensive utilization. At the same time, we must strengthen the work of popularizing science and technology. From a long-term point of view, we should attach importance to the investment in mental resources and develop them. (February 1983; Editor-in-charge: Shi Ying [1395 5391].)

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IMPORTANCE OF IRRIGATION TO AGRICULTURE STRESSED

Beijing SHUILI SHUIDIAN JISHU [WATER RESOURCES AND HYDROPOWER ENGINEERING] in Chinese No 9, 20 Sep 84 pp 7-9

[Article by Cui Zongpei [1508 1350 1014], standing council member of China Water Conservancy Society and chairman of Special Farmland Water Conservancy Committee: "Strengthen the Operation and Management of Irrigated Areas To Increase Agricultural Output"]

[Text] China is a large country with a population of 1 billion, and the question of feeding and clothing the people is of utmost importance. In the 35 years after the founding of the People's Republic, farmland water conservancy in our country has undergone great developments and increased the farmland's capacity to withstand droughts and floods. Despite the unfavorable conditions caused by the alternate visitations of droughts and floods in recent years, our agricultural output has continued to increase. In 1983, the total national grain output reached 774.6 billion jin with an average of 756 jin per person, and the supply of grain, cotton and edible oil was guaranteed. As required by China's grand general objective, the gross industrial and agricultural output value should be quadrupled by the turn of the century, when the total grain output should reach 960 billion jin with an average of 800 jin per person. The people will then be fairly well off in their material and cultural lives. We must, therefore, provide better irrigation facilities for agricultural development. In other words, irrigation should be more effective in helping increase agricultural output.

To increase agricultural output, we may, first, expand the farmland and, second, increase the yield of farmland. Since the present conditions in our country are not promising for the expansion of farmland, we must direct our efforts in raising the farmland's yield.

Many different measures are required in raising the farmland's yield. There must be adequate irrigation, soil, fertilizers and seeds, but "irrigation is the lifeline." Water is an important factor which is indispensable in raising the farmland's yield. Our country has all along, and particularly since the founding of the People's Republic, attached great importance to the development of irrigation in order to provide greater water resources for agricultural production. Today, our irrigated areas have increased from 240 million mu in the initial period of the People's Republic to 720 million mu. The

irrigated farmland, being less than half of all farmland in the country, has produced two-thirds of the total national grain output. This shows the important role played by irrigation in increasing agricultural output. However, like the expansion of farmland, the expansion of irrigated areas is also restricted by natural conditions and the most important one is the inadequacy of water resources which makes any large-scale expansion of irrigated areas very difficult. For many years, most of the regions with fairly good natural conditions have been already exploited, and those still left unexploited are generally in poor condition--either due to the shortage of water resources or because of the difficulties to be encountered in undertaking any engineering project. Thus the harder is it to embark on any new project, the more costly will be the construction per unit area. Nevertheless, the area of irrigated farmland per person, already small, should not be further reduced by the increase in population. Hence the need to expand the present irrigated areas in an appropriate and planned way. If the speed of irrigation development is calculated at the same rate--namely, 1 percent--as in the developing countries in the world, then in 2000, the total area of irrigated farmland in our country will be increased from 720 million mu to 880 million mu, with an average annual increase of 8 million mu which will be able to guarantee an average of 800 jin of grain for each person. This is the goal we are now striving for, and the task will be fairly difficult. We must conduct meticulous investigations and study and open more resources or avoid waste according to the actual conditions of water resources. We must also raise the utilization rate of water, plant more water-saving crops, and transform dry farmland into paddy fields in order to expand the irrigated acreage.

Since there are restrictions on large-scale expansion, we must tap the potential for increasing the yield of the irrigated farmland now available. average agricultural output in our irrigated farmland now is low and very uneven. Apart from the output disparity caused by weather conditions, good or poor management of the irrigated areas can also make a fairly big difference. Even though located in the same region, those areas that are under good management and are using new technology for irrigation and scientific methods for water supply can save water and achieve high yields of more than 1,000 jin per mu, while those that are under poor management or poor water conservancy conditions and unable to supply water in suitable quantities at suitable times, or fail to improve or supplement their inadequate water supply facilities, will have low yields--in some cases with per-mu yields of less than 400 jin. As to the way to tap the potential for increased output in the existing irrigated farmland, we, therefore, consider it necessary to improve the irrigated areas through scientific management and scientific farming so as to increase agricultural output. The specific proposals are as follows:

1. Reform the system of management in the irrigated districts. There are now approximately 6,000 irrigated districts under state management, all being more than 10,000 mu in area, and the administrative organs over them are all public agencies. If we do not reform the system in view of the present new situation, we will not be able to arouse the enthusiasm and creativeness of the affiliated organs and the administrative personnel, or to improve the quality of management. Therefore, we must create the necessary conditions for a gradual change in the way of management so that these districts can be run in the form of

enterprises. At the same time, we should expand their decisionmaking power, support their collection of reasonable water fees, and assist them in economic diversification in a way suitable to local conditions, so as to increase their income. Within the units, there should be a system of responsibility, or system of contract, for the stations and the personnel at all levels. Their work performance should be evaluated and linked up with their economic benefits. This will serve as a supplementary measure to enhance everyone's devotion to work and sense of responsibility. In addition, we should also set up various systems of scientific management and encourage the administrative personnel to study technology and to increase their vocational competence. The 12th International Irrigation Conference was held in the United States this year. Summing up the views on strengthening the management over irrigation, the meeting pointed out the need for more active participation in management by the peasants who are water users, for constant economic analyses, and for close cooperation between the water supply units and the farms. These are valuable experiences in improving the management and raising the output, and should be useful to us for reference.

Raise the scientific and technical standards of the administrative personnel of the irrigation districts. In 1980, the Food and Agriculture Organization of the United Nations held a meeting of experts on the control of water consumption. After the meeting, it was pointed out that one of the key factors obstructing the improvement of irrigation management was the lack of trained administrative personnel for the implementation of management plans. In the past several years, despite fairly good improvement in the management of our irrigated districts, the management level of many units has remained low. One of the causes is the lack of trained administrative personnel. The proportion of technical cadres is small in the administrative units of some irrigated districts. Because of their low vocational efficiency, these units have already found it hard to maintain simple production and to ensure water supply, and it would be even harder for them to improve the irrigation technology or to achieve better economic results. This situation should not be permitted to continue. We must train the personnel in a planned and organized way, and the specific method is as follows: Training classes of various types should be held according to the qualifications of the workers and staff members in the irrigated districts. These classes may be short-term, lasting only half year, or long-term, lasting 1-2 years, and the training should be based on the qualifications of individual workers. If their vocational background is weak, they can learn the basic knowledge of irrigation and drainage, the maintenance and control of these facilities, and the methods of their operation. If they have a strong vocational background, they can study theories of irrigation and drainage engineering, effective measures for water and energy conservation, and techniques for testing the quality and measuring the quantity of water, and learn about buildings and their maintenance. Through the training, they can also come to understand the trend of development in irrigation and drainage in the world, the new technologies used at home and abroad, the development of new materials and new equipment and their use. After the first training course, a second course can be conducted after a certain number of years so as to update their knowledge. After all, human efforts are required for everything, and knowledge is power. Only by increasing the knowledge and skill of the personnel concerned through training can we

efficiently manage the irrigated districts, improve their results, and better serve agriculture in increasing output.

- 3. Complete the supplementary projects as soon as possible. The so-called supplementary projects basically refer to the finishing of uncompleted projects. The number of irrigation projects built in the 1950's generally left nothing uncompleted, and water was available for the farmland immediately upon completion. Later, however, many irrigation projects could not be completed without interruption and a great deal of finishing had to be carried out. Apart from those at the water sources and the trunk and branch canals, many projects in the farmland below the branch canals had to be left over for the localities or the peasants. As a result, many irrigated areas, restricted by their material and financial resources, had to leave their supplementary projects uncompleted for a long time, thus preventing the areas from playing their full role. Winding up these projects and carrying out the necessary renovation and transformation require less investment and yield quicker results, and therefore should be attended to first. It is hope that funds can be allocated or raised to complete these projects by groups and in different periods according to the conditions of each irrigated area so that they can produce due economic results as soon as possible.
- 4. Actively popularize new techniques. New techniques in irrigation can help save water and increase the rate of effective utilization. It can also reduce energy consumption and lower the cost of water supply. In coordination with other new techniques in agriculture, it can also increase the per-mu output. All these are what we hope for. Since land is plenty and water is scarce in the north, the adoption and popularization of some advanced new water-saving techniques are very urgently needed. For example, the rather poor facilities for preventing seepage in the canals of our irrigation areas have caused fairly heavy losses in water circulation. In our canal networks, the average coefficient of effective utilization is lower than in the United States (0.78) and Japan (0.61). Many of our irrigated areas have adopted advanced seepage prevention measures and raised this coefficient. In most cases, however, this coefficient is still fairly low, meaning poor water utilization. If the canal networks with low coefficients of effective water utilization can adopt effective measures to prevent losses from seepage, the amount of water saved would be considerable, and the irrigated areas can be expanded or used for some other purpose. In addition, the new techniques for measuring and distributing water and for the observation and preservation of soil moisture should also be adopted and gradually popularized.

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QIAN XUESEN URGES AGRICULTURE-TYPE INDUSTRIES

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[Article by Qian Xuesen [6929 1331 2772]: "Establish Agriculture-type, Knowledge-Intensive Industries--Agricultural, Forestry, Grass, Marine, and Sand Industries"]

[Text] What Are Agriculture-type, Knowledge-intensive Industries?

They represent comprehensive and high-yield production which uses sunlight as the direct energy source and which fully utilizes biological resources and modern science and technology in its entirety.

Agriculture-type industries from a system which, like traditional agriculture, uses sunlight as the direct energy source and relies on photosynthesis in terrestrial plants to produce products. Sunlight is a powerful energy source. The sunlight energy received annually by each mu of our country's land is equivalent to 114 to 190 tons of standard coal. This exceptional natural superiority is enjoyed by agriculture-type industries.

Of course, we do not mean that this solar energy can be fully used by the plants to synthesize products. Because of various limitations, namely, the supply of water and fertilizers, the concentration in the air of carbon dioxide, which is necessary for photosynthesis, and the abilities of the plants themselves, only a very small proportion of the huge quantity of sunlight energy mentioned above can be converted into plant products. This proportion is less than 1 percent, and is often a mere 0.1 percent. Where does the remaining 99 percent or more of sunlight energy go? It does not immediately depart from the earth, but escapes into the air, raising the temperature and evaporating water. Winds and rain are formed in this way. Therefore, on earth, sunlight energy also turned into wind power and water power resources. Agriculture-type industries must also use wind power and water power for production.

Even regarding that part of the sunlight energy which has changed into plant products, man cannot directly use the whole of it. Thus, in the case of grain crops, solid seeds account for less than half of the dried products, and the remaining 60 percent is straw. At present, in the countryside, the

supply of fuels is inadequate and the straw from crops is often burned like firewood, so that fertilizers and organic matter cannot be returned to the farmland. This amounts to a great waste.

The way to increase the agricultural yield is to fully utilize the products of photosynthesis in plants, to try all means to add intermediate links, and to utilize the useful products of the intermediate links. For example, straw, leaves, and grass can be processed to yield mixed feeds, which can then be used to raise eattle, sheep, rabbits, chickens, ducks, and geese. Cow dung is useful in the growing of mushrooms and earthworms. Earthworms can be a high-protein additive to feed. Their excreta can also be used for processing into feed for use in fishponds or used in methane-generating pits for producing gas fuels. Fishpond mud and dregs from methane-generating pits can also be used as farm fertilizers.

Thus, on the one hand, we can fully utilize biological resources, including plants, animals, and microorganisms; and on the other, we can use industrial production techniques, including the whole of modern science and technology and the results of new technological revolutions. We can have both modern technology and rigorously organized assembly line-type production processes with very closely integrated subprocesses. This is a system of agriculture-type knowledge-itensive industries and represents an orientation we should pay attention to. Differing from traditional agriculture, these industries constitute a production system or an industrial system which is characterized by the use of sunlight as the direct energy source and by the exploitation of living organisms in comprehensive and high-yield production.

Classification of Agriculture-type, Knowledge-intensive Industries

The five categories of industries: agricultural industries, forestry industries, grass industries, marine industries, and sand industries, are classified according to their main production activities, because such activities determine the entire industrial structure.

Agricultural Industries

Agriculture-type, knowledge-intensive industries can be divided into five categories. The first is farmland-related agriculture, which is based on the growing of grain crops and industrial crops. This group of industries receives the greatest attention at present, because they take up the largest proportion of our country's labor force and the value of their output is the highest. Aside from the growing of crops, they also include afforestation, animal husbandry, poultry raising, fish raising, the keeping of insects and worms like bees and [word indistinct], and the culture of fungi and microorganisms (to produce methane and protein from unicellular living organisms). Of course, they also include sideline occupations and manufacturing industries. Therefore, they constitute an agricultural industries system marked by the simultaneous development of 10 different occupations. I think that if we want to do thorough research on and develop this industrial system, we must consider setting up experimental points in various regions in light of

their own local conditions, so that scientific and technological forces can be pooled, experience can be gained, and paths of development can be opened up.

How big should an experimental point be? In considering this question, we must look farther ahead. In the past history of the formation of capitalist society, the countryside was disrupted, cities were built, and people swarmed into big cities. Today, the path we must take is that of the simultaneous development of cities and rural areas and the coordinated development of cities and market towns. The bases of the above-mentioned agricultural industries should be market towns with a population of about 10,000 people. Only a minority of the population will do direct crop-growing work. Living in the market towns also, they will go out for work early in the morning and go home late in the evening. Other types of production, such as the intensive processing of grain and the foodstuffs industry, will also be located in the mariet towns. Market towns will be centers of production, cultural undertakin s, and education. The building of houses should not take much land. In the future, it will even be possible to develop underground structures which are warm in winter but cool in summer and which do not occupy any space above ground level. Parks and gardens for recreation and rest will be built on the ground.

Forestry Industries

Forestry industries constitute another category of agriculture-type, knowledge-intensive industries. If barren hills and mountains suitable for afforestation are included, the forest land area in our country amounts to 4.5 billion mu or more, three times the area of agricultural land. At present, the situation of forestry industries is relatively backward compared with that of agriculture, and people are trying to discover the most appropriate production relations.

If the questions of production relations and production systems are resolved, the next questions to be resolved will be the organization and technology of production in the forestry industries. In this respect, the production of edible oils and oils for industrial use from woody plants must be developed, and certain methods used in the agricultural industries can be used for reference. Of course, forestry industries also include production in the areas of animal husbandry, poultry raising, keeping of insects and worms, culture of fungi and microorganisms, sideline occupations, and manufacturing industries, as well as some crop growing and breeding of fish in ponds.

However, forestry industries are mainly characterized by the processing of lumber from forest trees and the utilization of branches and leaves. At present, logs are transported from the forest areas to the cities for processing; this method should be examined. Can the lumber be processed into semifinished or finished goods within the forest areas? Can the forest areas directly supply paper to other places? If this can be done, and if branches and leaves can be utilized, then the forestry industries sector can also greatly develop the production of feed and develop animal husbandry. Animal

dung can be used to raise earthworms and so on, which yield protein-containing additives for free. The large amount of liquid organic wastes excreted by them can also be used to produce methods for use as fuel for the forestry industries. Our country's forestry industries cannot only supply edible oils, oils for industrial use, wood products, paper, meat, milk products, and so on, but can also supply annually a quantity of methane equivalent in energy content to over 100 million tons of standard coal.

It is also necessary to gain experience through experimentation in building knowledge-intensive forestry industries.

Grass Industries

Another category of agriculture-type industries is production related to operation on prairies. This category may be called the grass industries. The total area of prairies in our country, including sand-covered areas which were prairies in the past and which can be returned to their former condition, amounts to 4.3 billion mu, three times the area of our famrland. However, our country's prairies are at present sun and used in a highly extensive way and with very poor results. This situation can be changed by using science and technology to turn the grass industries into knowledge-intensive industries.

How should we use modern science and technology and to develop grass industries? We must proceed from using sunlight energy to achieve good results in photosynthesis; that is, we must carefully grow grass so that the prairies can yield large quantities of superior quality and highly nutritious forage grass. This involves the work of introducing and cultivating fine varieties of grass and also the work of controlling of preventing natural enemies of calamities, such as killing rates. The per mu yield of hay in prairies which have been subjected to this kind of scientific transformation can be much higher than at present.

If a prairie is not used for animal husbandry, its grass must be reaped and sent to feed processing factories at the right time. This involves the questions of the number of harvests per year and what should be the best times for harvesting. However, the feed-processing technology based on the use of forage grass must be relatively mature.

Because the production of feed is largely within the factories, the feeding of animals naturally should also be marked by considerable concentration and factory-like operation.

Milk as an animal product and adult animals ready for slaughter must be sent to centralized processing factories for further processing and comprehensive utilization. Some resulting products, such as powdered blood or bone meal, must be sent to scattered feed-manufacturing factories for use as additives.

In light of the above-mentioned tentative idea of multistage utilization, the waste materials from feed processing and the animal dung from animal

feed centers must also be fully utilized, for example, to cultivate fungi, to raise earthworms or fish, to produce methane, and so on. If a large quantity of methane can be produced, it can even be used as fuel for vehicles and tractors or for generating electricity. These production and residential centers will have populations of about several hundred inhabitants; they will constitute production bases of grass industries and will operate prairies which are a dozen-odd to 20 km across. Because each of these residential centers will have a population of several hundred people, it can have a primary school and junior secondary school, a power station which uses methane or wind power as its energy source and whose capacity can be as much as 1 megawatt, a supply of water for production and daily life, and so on. The inhabitants of these centers can directly receive television programs via communications satellites. This is the picture of a modern new village undertaking grass industries.

Comprehensive animal-products-processing factories will be in small towns which are of the same level as counties. These towns will also be political and cultural centers which should have secondary technical schools and technical teacher-training schools specializing in the study of grass industries.

With the building of these knowledge-intensive grass industries, scores of millions of tons of beef and mutton, as well as large quantities of milk producets, will be produced annually, so that the diet of the people in our country will also change. Of course, to achieve success, we must appropriately set up experiemental points in order to gain experience.

Marine Industries

"Marine industries" are another category of agriculture-type, knowledgeintensive industries. They make use of seas, beaches, and sandbanks. In our country's coastal regions, there are 7 billion mu of seas, beaches, and sandbanks, among which sandbanks in shallow seas amount to 2.2 billion mu. These indeed constitute huge resources. Here, of course, we must mainly rely on the products of photosynthesis in naturally occurring marine living organisms. Using these products as feed, we can breed, raise, and catch fish, shrimps, shellfish, and so on. Thus, this category of prodcution is like animal husbandry on prairies, whereby grass occurs naturally and animals are fed on the grass so that they can grow and be fattened. Of course, over many years in the past, we have been far from able to undertake marine fishery in the form of herding living creatures; we only caught marine creatures without breeding or raising them, just like man in the earlier stages of primitive society, who made a living by hunting before the appearance of animal husbandry. We thus realize that turning "hunting" into "herding" is the path to building knowledge-intensive marine industries.

However, in the past, we never regarded marine industries as an independent system of industries, but considered them as part of so-called fishery or agriculture. Recently, there have been some signs of change. In Shandong, Rongcheng County, take stock of its 300-odd km coastline, its 500,000-mu shallow beaches, and its aquatic products output, which accounts for one-third of that of Shandong Province, has decided to build a number of small

harbor towns mainly specializing in the processing, raising, and breeding of aquatic products. In these towns there will be aquatic-products-processing factories, nonstaple foods factories, plastic materials factories, value factories, fishing-boat repair yards, prawn breeding-grounds, and so on, which together constitute an industrial system. This reflects a leap in knowledge!

Correct knowledge will enable us to examine measures for building the marine industries. A pertinent question is the improvement of coastal fisheries. The area of our country's coastal waters is 5.6 times of that of Japan, but in 1982 the total output of all our marine fisheries was a mere 46 percent of the total output of Japan's inshore fishing. A possible technological measure for ending our situation of backwardness is to install artificial reefs to form a habitat for fish; this will create a good environment for fish living in coastal waters. This measure alone can raise the annual output of our country's inshore fishing by over a dozen times, to 50 million tons.

With further advances, we should turn marine fishery into "marine herding." That is, making use of the instinct of certain species of fish which return to fresh water to lay eggs, we can create conditions for their fry to grow in niches in rivers. When the fry have grown into young fish, they will travel to the sea by themselves. Later, the adult fish will return from the sea, and this will be the right time to catch them. These species of fish include top-grade fish eaten in China, such as the hilsa herring and the dog salmon.

The range of marine industries is naturally much wider than what is described above. They include the cultivation or raising and breeding of kelp, seaweek, shrimps, and shellfish. Moreover, with a greater variety of marine products, the processing and in-depth processing of these products for the sake of full and comprehensive utilization will be a necessary development.

Of course, in building and developing market towns specializing in marine industries, we must carry out experimentation and thus gain experience.

Sand Industries

The last category of agriculture-type, knowledge-intensive industries is the sand industries that exploit deserts and the Gobi Desert, which, amounting to 1.6 billion mu in our country, are equal in area to all our farmland. It is not true that nothing ever grows in deserts and the Gobi Desert. Only a minority of them are extremely dry and devoid of plants. The majority receive some rainfall and possess some plants; in some, there are ever many small perennial plants. A minority of deserts were formerly dry land which have now become deserts; we may consider irrigating them.

What people now obtain from the deserts and the Gobi Desert is limited to special medicinal herbs. However, people pick these herbs without planting them. Sand industries should include both picking and growing, so that output can be increased. In other countries, people are now studying the growing of "petroleum plants" from which products similar to crude oil can be extracted after harvesting. Thus, deserts and the Gobi Desert can become

an inexhaustible ground-level oilfield, and this will be a great development of the sand industries.

I have briefly explained five categories of what we call agriculture-type, knowledge-intensive industries. Their classification into agricultural, forestry, grass, marine, and sand industries is based on the principal production activities in each category. A specific production activity can belong to two different categories. Overlapping is possible [words indistinct], for example, forestry operation can be included in the agricultural industries, while crop growing can also be included in forestry industries. Nevertheless, there can be clearly defined categories of industries; the classification is based on the main production activities which determine the structure of entire categories of industries.

We Must Do a Great Deal of Work

In building agriculture-type, knowledge-intensive industries, we must use our entire range of knowledge and organize the forces of various quarters in tackling key problems. The study and development of agricultural systems engineering constitute the main task in the building of agriculture-type, knowledge-intensive industries. It is necessary to run comprehensive science and agriculture universities and to train qualified personnel specializing in agriculture-type industries.

Because the industries in question are knowledge-intensive, we must organize and run them by using fully all applicable knowledge, including that of the natural sciences, the social sciences, and engineering technology. A great deal of work must be done in this area. While all advanced experience and science and technology of the whole world must be assimilated by us, we must also tackle key problems by organizing our country's own forces, which include various institutions of higher learning, various scientific research organizations, the Chinese Academy of Agricultural Science, the Chinese Academy of Forestry Sciences, the Chinese Academy of Sciences, the Chinese Academy of Sciences, and so on.

A major task in scientific research work is the full-reale investigation and study of biological resources, because the fulfillment of production tasks in agriculture-type, knowledge-intensive industries depends on living organisms. This seems to be an old task. Have not biologists been doing this kind of research over several centuries in the past? Yes, this is an old task; but there is some new content, namely, the development from qualitative observation to quantitative observation. This is because the operation of our industries must yield great results; moreover, the organizational structure of our industries will be very complicated, with very close and elaborate connections between various levels and between various links, so that there must not be the slightest mistakes; the organization and command of production will be subject to calculation by means of computers. Thus, the quantitative relations of biological processes must be accurately determined, and qualitative determination will be inadequate. This will set more stringent demands on the investigation and study of biological resources.

Another major task in scientific research is the development of biological engineering technology, which arises from new technological resolutions, including cell engineering, enzyme engineering, genetic engineering, and so on, and which will serve agriculture-type industries by greatly enhancing the results of biological production, by greatly enhancing those biological functions which are useful to production, or even by creating new living organisms.

Scientific research aimed at developing new technology also includes several areas. The first example is biological factories which use living organisms to carry out production. We must develop this technology. The second example is the methane-generating process, which we must study. The results of production must be enhanced so that the current daily per-square-meter output of methane-generating pits can be increased from 0.1 cubic meters to methane-generating pits can be increased from 0.1 cubic meters to over 1 cubic meter. The two-step fermentation method, developed by the Chengdu biological research office of the Chinese Academy of Sciences and other units, is a good start. This method may enable us to attain that target. The third example is that the raising and breeding of earthworms must gradually develop from the relatively primitive method currently used by us to continuous production under fully automatic control. There are also other examples. This category of technology will develop rapidly with the wider application of biological technology. We must pay attention to it.

Another area of scientific research for achieving development is biochemical engineering, which means using biological products as raw materials and using mechanical and chemical methods to isolate and manufacture new products in factories. Here the objects of work and processing are inanimate things. This area includes the utilization of various kinds of leftover, low-grade materials; for example, bones can be converted into bone dust, from which bone proteins can further be extracted; and left proteins can also be extracted from leaves.

Another category of science and technology which is very important to the development of agriculture-type, knowledge-intensive industries is systems engineering, which can facilitate agricultural production by furnishing techniques for organizing and managing complicated systems. Although agricultural systems engineering can play a definite role when applied to our present-day agriculture, and thus has a role which must not be underestimated, its power cannot be made fully manifest at present because our agriculture is not yet very elaborately organized. When applied to knowledge-intensive agricultural forestry, grass, marine, and sand industries, it will fully show its great power, not only in the organization of systems, but also in the management of daily production work. Therefore, studying and developing agricultural systems engineering constitutes an important part of the building of agriculture-type, knowledge-intensive industries.

Specialists are necessary in scientific research. Therefore, we must put forth the question of vigorously training qualified personnel specializing in agriculture-type industries. At present, inadequate attention is paid to

agricultural and forestry specialties in our country's education system, and engineering pecialties take up an overall large share. This disproportion must be corrected. Institutions of higher learning and secondary technical schools must take in a much larger number of students specializing in agriculture, forestry, biological sciences, light industries, and good industries. It may also be necessary to consider setting up a new category of colleges, namely "comprehensive science and agriculture universities." This is necessary for changing social values. Over many years, people have paid great respect to comprehensive science and engineering universities at the expense of agricultural universities. All high-prestige universities in the United States are comprehensive science and engineering universities. The same thing happens in our country. In the current reform, famous universities like the Qinghua University of Beijing and the Jiaotong University and Fudan University of Shanghai are to be converted into comprehensive science and engineering universities. Therefore, in order to establish the value of paying great attention to agriculture-type, knowledge-intensive industries, and in order to grain qualified personnel x ecializing in new agricultural, forestry, grass, marine, and sand industries, it is necessary to build comprehensive science and agriculture universities.

A Solemn Question That Calls for Deep Thought

Agriculture-type, knowledge-intensive industries will cause drastic, earth-shaking changes in our production system and economic structure. In China, where the first industrial revolution in world history occurred, the sixth industrial revolution in world history will appear in the next century.

The building of agriculture-type, knowledge-intensive industries is not merely a question concerning those industries themselves. Manufacturing industries, materials and raw materials industries, communications and transportation, the information industry, educational and cultural undertakings, the circulation of commodities, urban and rural construction, and daily life services must all keep pace with the development. Therefore, there will be great changes in production relations. This is a research task for political economics. Changes in the organization of the productive forces will even be greater, amounting to a major reorganization. This is a subject to be resolved by the economics of productive inces. The 800 million Chinese peasants are resolved by the economics of productive forces. The 800 million Chinese peasants are involved in the building of the 5 categories of knowledge-intensive industries, which entails a total investment of from several trillion yuan to 10 times that sum. Where should the funds come from? How can we make use of international financial capital? These are topics in the econmics of finance. The actual problems involved may be far more numerous than the three categories of problems mentioned above. Therefore, the building of agriculture-type, knowledge-intensive industries will greatly promote the development of social sciences in our country.

Do all these things not mean earthshaking changes? Do they not mean that our country will further build Chinese-style socialism and advance toward communism in the 21st century, after the quadrupling of output by the year 2000? If we define the first industrial revolution in world history as the

appearance of agricultural production and animal husbandry in China about 10,000 years ago, the second industrial revolution in world history as the appearance of the production of commodities in China about 3,000 years ago, the third industrial revolution in world history as the appearance of large-scale industrial production in England in world history as the development of national and international industrial organizations systems in developed Western countries at the turn of the 19th century, and the fifth industrial revolution in world history as the global revolutions in production caused by the current new technological revolutions, then will not the changes in the production system and economic structure caused by the building of agriculture-type, knowledge-intensive industries constitute the sixth industrial revolution, which will appear in socialist China in the 21st century? Is this not a solemn question that calls for deep thought?

STABILIZING LAND CONTRACT SYSTEM

Beijing NONGYE JINGJI WENTI [PROBLEMS OF AGRICULTURAL ECONOMICS] in Chinese No 3, 23 Mar 84 pp 29-32

[Article by Juxian County CPC Committee, Shandong Province: "Grade and Appraise Farmland and Issue Certificates To Stabilize Land Contract Relations and Encourage Peasants To Increase Work and Invest"]

[Text] Guided by 1983 Central Committee Document No 1, Juxian County is gradually strengthening and perfecting the joint production contract responsibility system in agriculture. In order to assist the peasants to think in terms of long-range management and actively increase work and investments in contracted responsibility fields, ensure that the more the land is cultivated the more fertile it becomes, and continuously increase production benefits, we have, through surveys and research and expanding over a whole area from one point, tentatively tried out the practice of grading and appraising farmland and issuing certificates. There are 879 production brigades in Juxian County which have completed this work at present, 70.3 percent of the total number of brigades in the county. Implementing these measures has stabilized land contract relations, encouraged vast numbers of peasants to increase work and make investments in the land, and promoted in-depth development of farmland capital construction.

A. Why must We Grade and Appraise Farmland and Issue Certificates?

The 1983 Central Committee Document No 1 points out, "As regards carrying out measures to increase work and investments in the land, there is still improper land contracting in some localities and a lack of encouragement to improve the soil, ... (which) must be taken care of as quickly as possible." We are in touch with the current new situation and problems appearing in the countryside with respect to management and use of the land, and feel that concentrating on stabilizing contractual relations is the key to further strengthening and perfecting the household contract responsibility system, and reflects the wishes and needs of the mass of peasants. Considering the following aspects of the situation, there is a need to employ the method of grading and appraising farmland and issuing certificates, as well as making reasonable compensation for investments, to encourage the peasants to increase work and put investments into the land:

- 1. Encourage the peasants to use the land rationally and effectively, and continually raise production benefits. The household production contract responsibility system has been widely popularized in Juxian County since 1981. This has effectively motivated vast numbers of peasants to carry on meticulous and intensive farming, enormously increased the land utilization rate, brought about a definite tapping of the potential for increasing output from the land and ushered in a new phase of reaping bumper harvests for many years running. However, while the new form of land administration of collective ownership and dividing management among households separates ownership rights and use rights, and there is a definite contradiction between the two, we are precisely lacking administrative regulatory measures with respect to this contradiction. As time goes on, therefore, many new problems are gradually revealed with regard to land management and use, chiefly: in the area of investment, the peasants frequently pursue benefits in the short-term and are willing to pay high prices for quick-acting chemical fertilizers, yet are unwilling to increase the use of organic fertilizers; in utilization, they are satisfied with full cropping for bumper harvests for the season or year in question, while not paying attention to processing and transforming the land or building up soil fertility; in administration, they are more concerned with use than with good management. Long-term and relatively costly capital construction is not keeping pace, and individual households have gone so far as to remove soil to construct walls, dismantle dams to build houses, cultivate earthen barriers indiscriminately and destroy vegetation, bringing about serious soil erosion. If these problems continue for a long period of time without being resolved, it probably will lead to a decline in soil fertility where the more land is cultivated the poorer it becomes, affecting the raising of production benefits. Therefore, we must adopt measures as quickly as possible to encourage the peasants to utilize the land more rationally and effectively, ensure that the more the land is cultivated the more fertile it becomes and that benefits are raised higher and higher; all these are extremely important whether approaching the subject from a practical standpoint or in terms of long-range benefits.
- 2. Construct a foundation for quadrupling the gross output value of industry and agriculture. Soil fertility is naturally the result of the multiple effects of social factors and the most basic means of production which mankind relies on for its very existence. What is more, it is a permanent means of production and one which may continually be renewed if properly managed and utilized. Agriculture is the foundation of the national economy and the land is the foundation of the foundation. Our doing a good job at present of grading and appraising farmland and issuing certificates, encouraging the peasants to manage and utilize the land scientifically, continually renew it and enhance its fertility and make every effort to produce more grain and economic crops on a limited amount of cultivated land is important foundation work to stress the strategic essentials of agriculture and create conditions to achieve the quadrupling of gross output value of industry and agriculture by the end of this century.

- 3. Further strengthen and perfect the responsibility system. The joint household production contract responsibility system generally has been set up and stabilized at present. There are still many links which need to be perfected however. For example, with respect to management and utilization of ordinary means of production such as large agricultural machinery and farm implements, farm cattle and irrigation facilities, there are a set of management and utilization methods for most which are fairly practical and feasible; for the land alone are essential management and use regulations lacking. Grading and appraising farmland and issuing certificates could patch the holes and leaks in land management, and thus promote further strengthening and perfecting of the responsibility system.
- 4. Stabilize contractual relations regarding the land and encourage the peasants to think in terms of long-range management. Through grading farmland and issuing land contract management and use certificates, we could impel the peasants to think in terms of long-range management.

B. Basic Approach

The specific methods for grading and appraising farmland and issuing certificates are the "six clarifications," "six fixes," and "all to the household [yi dao hu 0001 0451 2073]."

The six clarifications are: 1. Terrain clarification. Mainly this means to clarify the condition of the land surface as it exists and compute how many cubic meters of earth and stone must be transported to level those massifs which need to be leveled. 2. Soil quality clarification. This means to clarify whether the present soil is sandy, loam or clay. 3. Active soil horizon clarification. This means to clarify the depth of the active soil horizon of the present soil. 4. Soil fertility clarification. Through running laboratory tests on the soil, mainly clarify the organic matter content. 5. Irrigation clarification. This means to clarify whether the land is dry farmland or paddy fields, and whether irrigation is by gravity flow or raising water. 6. Subsidiary land resources clarification. This means to clarify the current situation concerning biological safeguarding and capital construction projects on the land.

The six fixes are: 1. Fix land grades. Land grades should mainly be determined on the basis of the soil profits [tuti zhuxing 0960 7555 4639 0992], soil classification, depth of the active soil horizon, organic matter content, irrigation conditions and how level the land is. Tracts of plains land are quite large and relatively even from one parcel to the next so it is not advisable to assign too many grades. For mountains and hills, because parcels are fragmented and the soils are complex, it would be appropriate to assign more grades, or employ methods to differentiate by evaluating quality. 2. Fix the value for land grades (divisions). Based on experience at key points, generally speaking we could take the average net output value of the fields of a production brigade for the previous three years and divide it by the total number of land

grades (divisions) of the whole production brigade; the numbers obtained would be the grade (division) value for each land grade (division). 3. Fix the criteria for going up in grade. In reference to the assigned grade, clearly stipulate the extent to which the soil profile, soil quality, active soil horizon, organic matter, how level the land is and irrigation conditions have undergone processing and transformation, and determine the number of grades (divisions) it has increased. However, the value of the labor and investment expended for each step increase for any grade (division) must more or less tally with the value for that grade. For example, if the active soil horizon of one mu of land is lowered 10 centimeters from the present base and the value of labor and investment expended is 25 yuan, if the land grade (division) value is 25 yuan the rise is one grade (division); if the land grade (division) value is 50 yuan the rise is one-half grade (division). In view of the fact that the land situations for various units are different at present, stipulation of the criteria for rising in grade (division) must be based on reality and in accord with local conditions; they may be many or may be few. 4. Fix the value increase (namely investment compensation) for a rise in grade (division). Multiplying the grade (division) value by the number of grade (division) increases gives the rated value increase for the rise in grade (division). For land which drops in grade due to mismangement, we must rationally determine the amount of compensation money based on the extent of losses. 5. Fix a responsibility system for managing subsidiary land resources. First, with regard to animals and plants presently sheltered on the land, fix the value one by one for each household. If these and the crops are protected the increase in value goes to the person or the fruits of labor are divided proportionately; compensation must be made for damage. At the same time, we should determine methods for transferring possession of the new increases in sheltered plants and animals. Secondly, as regards farmland capital construction projects in place today, the resources generally should go with the land and the responsibility go to the household, and we should implement a system of rewards and punishments; for new, added projects, when the land is transferred, the collective will determine the value according to the quality and make payment. 6. Fix methods to make good on commitments. This means that in the wake of the development of commodity production and raising the level of specialization, when the commune member leaves the land of his own accord to engage in some other line of work, a land assessment will be made based on the targets that have been set and all rises in grade and increased value, and the collective will make an investment compensation payment to the original contracting household; payment by the original contracting household must be guaranteed if the land grade and value drops because of mismanagement and misuse. If economic diversification brings a high income and conditions permit, it is possible to fix the land assessment at once every three or five years to win the people's trust and more effectively encourage the peasants to make investments in the land.

"All to the households" means that a land management and use certificate will be signed and issued household by household. The certificate will clearly state the full name of the head of the contract household, the area of the contract land, its location, grade and the land value, and will

have attached as well a ledger for assessing and recording compensation to be paid to the household for increases in grade and value of the land or payment due from the household for a drop in land grade. When a commune member transfers land, in addition to filling out the land management and use certificate, he must also go through the land transfer procedures. The person filling out the form must transfer the assigned listings, clearly state the effective date of the transfer, the location of the land, area, grade, value, the full names of the transferring household and the receiving household, and the witness. Three copies are to be made, one to be placed on file with the collective and the other two to be given to the transferring and receiving households, respectively.

Specific steps in the process of implementing the above approach are: 1. Do a good job of arousing the thinking and unifying the understanding of the cadres and masses. Through holding various meetings for the cadres and for the masses, repeatedly explain the significance and benefits of grading farmland. At the same time as arousing thought, establish special groups and set to work. Those participating in the work groups for the most part will be highly responsible people from brigade, party branch and management committees, brigade accountants, production team leaders, bookkeepers and commune member representatives. 2. Study the specific content and methods of the "six clarifications" and the "six fixes" and come up with a comprehensive plan for grading farmland throughout the whole production brigade. 3. Carry out on-the-spot field inspections and appraisals, mainly through dividing the special work groups into smaller units to go right into the fields parcel by parcel and tract by tract to acertain and register what is required by the "six clarafications." At the same time, take soil samples from selected points and run laboratory tests for organic matter content. 4. Carry out the provisions of "all to the household" by filling out a "land contract management and use certificate" household by household, affix the seals of the commune and production brigade, make two copies and give one to the household to take care of and file one with the brigade, and hold a general meeting of commune members and issue the certificates to the households one by one.

C. Results and Benefits

Although it has not been too long since we graded and appraised the farmland and issued certificates, the benefits are fully evident from initial trial implementation.

One result is it has stabilized land contract relations and eliminated the peasants' fear of "change." As far as the peasants' fear of "change" is concerned, after land contracting came to the households, the peasants lacked certain highly useful legal certificates, procedures and relations. The peasants said, "The higher authorities say there will be no change in the long term, but we do not rest easy because there is no permit in our hands." After grading the farmland and the land contract management and use certificates were issued household by household, not only was the peasants' anxiety over "change" eliminated, they began to think in terms

of long-range management as well. For example, the Wangjiagushan Production Brigade of Qiaoshan Commune had 300-plus mu of mountain slope land which contained more than 90 stone stockades and for the last several years the commune members had not bothered to remove them. They said, "Since responsibility fields are temporary arrangements, planned and cultivated one year at a time, it is not worth putting capital into them." After the present grading and appraising of farmland and issuing certificates, the commune members, one by one, set to tackling the problem, saying "Since we now hold a land use certificate in our hand and there is a good argument for exerting ourselves, who would not work?" The first experimental units to be issued certificates especially have created a sensation among the village teams around them and cadres at the grassroots level are moving ahead one by one to "learn from others' experience" while the masses call on their friends in person and go inside to see the land management and use certificates.

Another result is that it has further strengthened and perfected the joint household production contract system. Many units, because they lacked experience at the time they were in the process of setting up the household contract system, only concluded general household contracts, and they had yet to make specific provisions for setting up any kind of files or checks, perfecting procedures or strengthening management. Especially as regards subsidiary resources on the responsibility fields, most had no itemized register so things went everywhere; neither were the management and use responsibilities made clear, giving rise to undue losses. Grading and appraising farmland and issuing certificates will produce an itemized register of the area of the responsibility filed, its location, its form and appearance, land grade and land value as well as a register of subsidiary resources. In this way we will, on the one hand, stringently settle the matter of the system and procedures for land management and use; on the other hand, we will also ensure that measures for projects and animals and plants on the farmland will be carried out under the management and use responsibility system, making provisions for each item and assuring everything is accounted for.

A third result is that it further encouraged the peasants to invest the "four resources" into the land (labor, intellectual, financial and material resources). The reason why the peasants were not enthusiastic about farmland capital construction in the past was that, for one thing they were afraid of "change" and putting forth effort for nothing; for another, because relatively large-scale farmland capital construction requires a lot of work and money and the collectives lacked clear provisions for compensating for investments, the peasants thought better of expending a lot of effort and capital. After grading and appraising farmland and issuing certificates, households which increased the grade and value of the land through increased work and investments were compensated by the collective for the investment, while households whose management was responsible for a drop in grade and value made compensation to the collective. This intimately integrated rational, effective use of the land with the peasants personal benefit and thus motivated the broad peasant masses to increase work and make investments

in the land. For example, the Yujiashihe Production Brigade of Dianzi Commune had 750 mu of cultivated land on which the soil horizon was unproductive and the parcels were fragmented. There had been no deep plowing for many years and the organic matter content was only 0.7 percent on the massif with the highest content and less than 0.1 percent on the one with the lowest. After the land was appraised and certificates issued, winter production was bustling with activity focused on farmland capital construction. Every day more than 250 of the 496 people in the village engaged in deep plowing the whole field. Presently, deep plowing has basically been completed for 300 mu of land which lay idle during the winter, the most soil preparation in any year since the organization of cooperatives. This commune's Houxizhuang Production Brigade is located on a plain. In the previous several years none of the commune members returned the straw or soybean cakes to the fields. Shortly after appraising the land and issuing certificates commune members from more than 20 households throughout the village bought several tens of thousands of jin of soybean cakes and cottonseed cakes and prepared to put them on the fields. Some of the households indicated that beginning next year they will return straw to the fields. Since seven production brigades in the Gushan Administrative District of Qiaoshan Commune appraised the land and issued certificates this past winter they improved the soil through deep plowing on 1,500 mu, dammed up 9 mountain gullies, sank 2 large wells, constructed 2 pumping stations and repaired more than 9,000 earth mounds.

The results achieved by grading and appraising farmland and issuing certificates makes us think that although there is a definite contradiction in separating land ownership and use rights, if only we follow the above correct policies and management measures the mass of peasants will be completely able to utilize the land rationally and effectively and achieve the goal of continually increasing production benefits.

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WANG ZHEN WRITES INSCRIPTION FOR NEW PUBLICATION

OW240200 Beijing XINHUA Domestic Service in Chinese 0822 GMT 23 Oct 84

[Text] Beijing, 23 Oct (XINHUA)--With the approval of the Ministry of Agriculture, Animal Husbandry, and Fishery, NONG CONG SHANG XINXI BAO [AGRICULTURE, INDUSTRY, AND COMMERCE INFORMATION NEWS], the country's first newspaper for enterprises integrating farming, industry, and commerce is scheduled to begin publication next year. It will be distributed through post offices all over the country. Wang Zhen, member of the Politburo of the CPC Central Committee, has written an inscription for the newspaper, which reads: May the publication of the NONG GONG SHANG XINXI BAO contribute to the development of land reclamation enterprises as well as science, technology, and commodity production in rural areas.

NONG GONG SHANG XINSI BAO is a four-[word indistinct] and four-page weekly. It is geared to the needs of the country's land reclamation enterprises and the vast rural areas and serves enterprises integrating farming, industry, and commerce, state farms, pastures, and piscaries and industrial enterprises run by them; family farms, rural specialized households, town and township enterprises, and collectively- and individually-run commercial enterprises, for the purpose of helping them enliven the economy and achieve better results. The newspaper's main tasks are: publicizing the party and government's new policies and regulations concerning enterprises integrating farming, industry, and commerce; introducing new experiences in and measures for initiating enterprises integrating agriculture, industry, and commerce as well as carrying out comprehensive management of agriculture, industry, and commerce, reflecting new trends and new problems in reform of the economic structures; providing information regarding production, science and technology, commerce, and qualified personnel; improving the interflow of commodities; and accelerating the development of agricultural commodity economy.

ON MARGINAL INDICATORS

Beijing NONGYE JISHU JINGJI [ECONOMICS FOR AGRICULTURAL PRODUCTION TECHNOLOGY] in Chinese No 8, Aug 84 p 43-44

[Article by Chen Tong [7115 1749] of the Agricultural Economics Department, Northwest Agricultural College: "A Brief Discussion of Marginal Indicators"]

[Text] In order to comprehensively evaluate the economic benefits of an agricultural technology, we must set up a series of indicators to form an indicator system. When deciding upon indicators for the economic results of a technology, we also must pay attention to the law of decreasing marginal returns.

The law of decreasing marginal returns may be defined briefly as: At a certain level of technology, changes in the ratio between variable factor inputs and fixed factor inputs will eventually enuse a tendency for the marginal forces of production to decrease. This margin, or increase, reflects the proportional relationship between the corresponding output and inputs. To go further, it is a means of evaluating changes in output or input. In mathematical terms, the margin is a continuous function of the differential rate of change in output or inputs at any point. The concept of a margin is quite prevalent in agricultural production, and margins are present in practical agricultural production activities. We are now directly or indirectly applying this concept in analysis of economic activity, especially in analysis of the economic benefits of technology. However, when setting up indicators for the economic benefits of technology, we have still not considered and systematically listed marginal indicators. A series of marginal indicators are needed to meet the needs of practice in production and for analysis of the economic benefits of agricultural technology.

Marginal indicators use concrete numerical expressions and comparative relationships to reflect and measure marginal real rements in economic activities.

Setting up marginal indicators must be done in consideration of the special characteristics of agricultural production. Land is the most basic means of production in agricultural production. One of the developmental goals of agricultural production is to improve land productivity. The improvement of land productivity requires an input of a certain amount of resources.

including labor, means of production, capital, technology and so on. A system of indicators for the economic benefits of technology should take the following marginal indicators into consideration:

- I. Indicators of Marginal Land Productivity
- 1. Marginal output of land:

Marginal output of land = Change in output

Change in land area

This indicator reflects the degree of change in output per unit of increase or decrease in land area. It should be noted that using changes in the area sown to reflect changes in land area is of even greater real significance. This indicator is generally used in conjunction with the marginal land costs and price of output for analysis of economic benefits.

2. Marginal value of output for land:

Marginal value of output of land = Change in output

Change in land area

This indicator is the shadow price of land resources at a particular level of inputs. It reflects the increase or decrease in the value of output caused by an increase or decrease per unit of land area. It is of extremely important significance for economic decisionmaking.

- II. Indicators of Marginal Labor Productivity
- 1. Marginal output of labor:

Marginal output of labor * Change in output Change in amount of labor

The amount of labor used here can be defined in terms of a standard number of laborers, number of labor days or number of hours. The value of a labor day or similar figures can also be used. It reflects the degree of influence that a unit change in the amount of labor has on output. It combines consideration of the value of a labor day, the value of a unit of labor power, daily wages and so on with the price of the product, and can be used to determine the optimum limit for labor inputs.

2. Marginal value of output for labor:

Marginal value of output for labor = Change in amount of labor

Likewise, this indicator also reflects the shadow price of labor resources at a certain level of input. It describes the degree to which a unit increase or decrease in labor causes a reduction or increase in the value of output.

3. Marginal net value of output of labor:

Marginal net value of output for labor = Change in net value of product

Change in amount of labor

This reflects how changes in inputs of labor power at a certain level within a certain time period affect the new value created within that period of time.

III. Indicators of the Marginal Costs of the Forces of Production

1. Marginal cost of output:

Marginal cost of output = Change in output
Change in costs

This reflects the overall effects of changes in total factor inputs on trends in output. The combined value of the product can be used to determine the optimum amount of resources to invest.

2. Marginal costs of the value of output:

Marginal costs of the value of output = Change in value of output

Change in costs

Generally speaking, if an increase or decrease in the value of output is greater than the increase or decrease in costs, then economic benefits will be good and the amount of resources invested can be further increased. On the other hand, when an increase or decrease in the value of output is less than the increase or decrease in costs, then there should be an appropriate decrease in the amount of resources invested.

- IV. Indicators of Marginal Land Costs
- 1. Marginal land costs:

Marginal land costs = Change in costs

Change in land area

This indicator reflects changes in costs on a marginal unit of land area. In combination with an indicator of the marginal value of output of a unit of land, it can be used to determine the optimum level of the forces of production for a marginal unit of land.

2. Marginal land expenses:

Marginal land expenses = Change in expenses

Change in land area

This indicator reflects only trends of change in the value of the means or production for a marginal unit of land.

Apart from the above indicators, we can also calculate output, value of output and net value of output for several types of marginal inputs. Moreover, there also can be a series of indicators set up for the relationship between one product and another product, or between one input and another input. Finally, when using these indicators, they should be used in combination with other evaluative indicators before they can aid in analyzing economic benefits.

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AGRICULTURE BANK TO EXTEND FURTHER LOANS

OWZ 30905 Beijing XINHUA in English 0838 GMT 23 Oct 84

[Text] Beijing, 23 Oct (XINHUA) -- The Agricultural Bank of China will extend a further 200 million yuan in loans this year for development schemes in farming, forestry and fisheries, the ECONOMIC DAILY reports today.

About 200 million yuan has already been loaned this year, the paper says.

The money will be used to develop barren mountain slopes, wasteland, fish farms, grasslands and areas reclaimed from the sea, and to help improve ecological environment.

Major schemes include tree planting in Guangxi and Fujiang, prawn breeding in Liauning and freshwater fish breeding in Hunan and Jiangsu.

The Agricultural Bank of China began offering development loans last year, when 47 million yuan was provided for various schemes across China, according to the ECONOMIC DAILY.

As a result, 100 prawn-breeding farms and fish ponds totalling 670 hectares were established in Liaoning Province.

Local peasants earned 14 million yuan from prown breeding alone, the paper says.

China has 10 million hectares of barren mountain slopes and wasteland suitable for planting trees, and nearly 270 million hectares of grassland and grass-covered mountain slopes suitable for livestock.

CSu: 4020/30

THEORETICAL BASIS OF LAND CONTRACT SYSTEM DISCUSSED

Beijing NONGYE JINGJI WENTI [PROBLEMS OF AGRICULTURAL ECONOMICS] in Chinese No 5, 23 May 84 pp 20-23

[Article by Zhang Dexiu [1729 1795 0208], Editorial Department, NONGCUN GONGZUO TONGXUN [RURAL WORK BULLETIN]: "An Examination of the Problems Associated with Land Income, Contracts and Transfers"]

[Text] China has a large rural population but little land, her commodity economy is undeveloped and thus land plays a prominent role as an irreplacable, basic means of production. This article will employ the Marxist theory of land rent and discuss some ideas concerning the problems of land income, contracts and transfer under socialism.

I Land Income Under Socialism

In Chapter 3 of "Capital," Marx brilliantly and systematically revealed the true nature, premises and causes of capitalist rent; pointed out that the concept of rent sets the economic pattern for capitalist ownership and represents a transfiguration of surplus value, which is that amount that exceeds average profit; and thus established a rigorous, scientific theory of economic rent. According to Marxism, a socialist society repudiates private ownership of land, the state in such a society practices planned economy, and thus the causes of and bases for the existence of rent are denied, absolute rent cannot survive and differential rent is transformed.

Nevertheless, the socialist society that China has established is nothing like the "ideal model" Marx envisaged: Public ownership of land has largely been effected through the collective, which at this stage is the production team, and there is variation in the amount of land held by each team. Monopoly of land ownership and management is mited in each collective, and thus these economic organizations retain and do not transfer the income they derive from their land, which profit is equivalent to surplus product. Monopoly of land ownership and management, therefore, is still expressed through economic form. That is to say, all other natural economic factors being equal and with similar animate and inanimate labor investment, two collectives owning and managing different amounts of land will earn different incomes due to unequal labor productivity. The supply of land has an especially crucial impact on the productivity of collectives in China, which has a

relatively large surplus of rural labor. If all other factors are equal, a larger amount of land will bring higher labor productivity, and the resulting income differential is generally known as absolute land income, which is essentially distinct from the capitalist concept of absolute rent. First, absolute land income stems not from the need to pay rent to private owners but rather from the fact that the system of public ownership is effected within each collective. Collectives own and operate different amounts of land per capita and therefore receive different incomes. Thus absolute land income originates in collective monopoly of land ownership and management. Second, absolute land income is not surplus value that is created by one group of people and assumed as unearned income by another group but rather is produced through the labor of every member of the collective, and thus no exploitative relationship obtains. Third, absolute land income does not originate in the profits created when the price for agricultural goods exceeds production costs but rather represents variation in labor productivity engendered by differences in land holdership and therefore can only be found when one contrasts collectives having unequal amounts of land on a per-capita basis.

Variation still exists in fertility and other cultivated-land conditions among different regions and localities of our country and in the level of intensification achieved in each collective. Thus some collectives earn excess income through higher productivity engendered through better farming conditions or through application of extra amounts of labor. This is called differential land income. Land supply is limited, and good land (having superior location and fertility) is even dearer. Therefore, production teams that cultivate good land unite ownership and management of such land, long maintain an advantage in productive conditions and thus earn superprofits consistently and continuously. This is called natural differential land income. In addition, teams apply different amounts of labor to their land, which also yields different productive results, or in some cases much larger application of labor must be made in order to obtain equal yields. These two types of differential land income are to be distinguished from the differential rent of capitalism because they do not represent surplus value, which is created by agricultural laborers but appropriated by private owners or agricultural capitalists. Rather, these income differentials result from variation in labor productivity that is caused by differing natural factor endowments.

II The Land "Trinity" and Land-Income Distribution

In contradistinction to feudalism and capitalism, the socialist system of public land ownership combines land owners, managers and users into a "trinity." In China, land presents a constraint on labor for land owners—the entire membership of collective economic organizations—and is linked not only with direct producers—the cultivators—but also with owners and managers. Thus the income a collective derives from land does not have to be remitted to anyone as rent but rather is distributed (except for that portion that is appropriated by the state) within the collective. Prior to the implementation of the production responsibility system, the "trinity" was explicitly manifested when production teams distributed land incomes in accordance with population and work points.

Some people believe that the responsibility system has dismembered the "trinity," that land ownership still adheres to the production team, that peasants are now the managers and users of the land, that teams have the right to exact rent and recover the lands and that peasants have assumed the responsibility of paying rent to the team. I believe this view is incorrect. The production team is merely a form of collective economic organizations, represents a "union" of peasants and is not a organ that is imposed on top of peasants. The team's ownership of land represents that right as enjoyed by the entire team membership. After the production responsibility system was implemented, each household first remained a member of the team and then signed a contract with the team to conduct relatively independent management and utilization of a certain piece of land, which operations are subject to certain conditions and time limits. These terms, however, do not constitute lease periods and rent payments but rather comprise a new form of land management in the cooperative agricultural economy. This new form directly links peasants and their primary factor of production--land, repudiates the previous system of management which was a "trinity" more in name than in reality, makes peasant households-qua-team members the true owners of collective land and the direct managers and cultivators of the land they contract to use, transforms households into the active cells of the cooperative economy and brings new vitality to China's rural economy. Thus the production responsibility system has integrated land owners, managers and users; has not separated these roles; and even less has established "rental relationships."

Production teams both own land and extract a certain amount of product from the peasants. Thus some people believe that production teams employ their ownership rights to exact land rent, but this is a superficial conclusion. The essence of the economic relationship that obtains between the team and each peasant household defines these product extractions not as rent but as redistribution within the collective. Those collections that are used to pay cadres or to cover administrative costs, for example, are caused in part by the division of labor within the collective and in part serve as a kind of "tax." Even more normal are collections for public accumulation and welfare funds, which are created through regular social deductions prior to income distribution in the collective. There are also some people who believe that the taxes collected by the state amount to land rent. But China has by no means nationalized land, and the state's income is not comparable to differential rent. When the state exacts agricultural taxes, it is using its authority to collect goods and money. And, according to Stalin, the unequal-value exchange between agricultural and industrial products amounts to "a type of surtax" on peasant ("The Problems of Leninism," 1964 ed., p 282) and is not related to land ownership. No matter who owns the land, the state can exact these levies and "surtaxes" to redistribute national income. But some people might still be tempted to say that the state derives greater benefit from a larger exchange of industrial and agricultural goods and that this amounts to a larger differential income from the land. In fact, the situation is not like this at all. The exchange of products is an equal relationship among commodity producers and does not involve demands for land income. The exchange of unequal values is caused by (planned) pricing and extraeconomic obligations, and the income thereby derived by the state is similar in nature to taxation, except that here the relationship is expressed as a form of proportional taxation. It should be recognized that most land income is

distributed within the collective and that, following the implementation of the production responsibility system, that income now reverts to each individual household contractor. Meanwhile the state and the collective employ taxation and deductions to participate in the distribution and readjustment of land income, which is to say that part of the state's tax receipts and part of the collective's deductions derive from land income. A proper understanding of the relationship between the collective and the peasant household contractor under the production responsibility system will enable us more effectively to resolve the new problems that have appeared in land management: land subcontracting and the issue of how to encourage household contractors to carry out investment in and improvement of the land.

III Spontaneous and Compensated Subcontracting Among Peasants

The linkage of land and labor through the production responsibility system has ensured more stable income from the land. Nevertheless, under this system, "every family signs a contract for a piece of land, and every household farms," and increasing specialization in production, division of labor and other factors that grow in importance over time render some of these families unable to farm their responsibility fields and gradually make the current setup unsuitable. Thus some peasants have spontaneously begun to subcontract their fields over to other people. This practice represents a process of adjustment, resolves some of the contradictions involved in the distribution of contract fields, facilitates the development of households specializing in diversified farming and grain cultivation, promotes expansion of commodity production and effectively develops the potential of labor and land. Spontaneous subcontracting is conducted among peasants on the basis of voluntary participation and mutual benefit and is the inevitable result of the development of production. With regard to this phenomenon, we must resolve the following two problems.

First, do household contractors have the right to subcontract their land? Such households possess the right to use their contracted land, but the "union" has the right to make land readjustments in accordance with the wishes of the majority of the membership. Peasants have the right to contract to use land, and they have the right to withdraw from such contracts when they engage in other occupations. This represents the two sides of the same issue. If, during the contract period, peasants become unable to cultivate their fields or move into other occupations, they may return all or part of their land to the collective, which will make unified arrangements. Or, with the approval of the collective, such peasants may make their own arrangements to subcontract their land to another party and discuss and decide the specific conditions of this transaction themselves. In such transactions, any arrangements that ensure payment of taxes to the state and deductions to the color or that more rationally integrate land--the subject of labor--and workers and the means of labor should be permitted. In this way, the "union's" right of final control over land is not compromised.

Second, is compensated subcontracting rational or not? Compensated subcontracting varies greatly in form, the amount of compensation involved differs and situations are complicated. Nevertheless, we may first affirm that each

peasant household has the right to contract land from the production team in which that household is a member. That is to say, each household has the right to a portion of the collective's absolute and natural differential land incomes. The household, therefore, should not be denounced as expropriating other people's labor when it subcontracts land, which is limited in amount and the household's plot of which is equal in size to those of other households, and requires that subcontractors render full payment of taxes and deductions and provide the original contractor with a certain amount of grain, money or labor service. Two implications follow from the "dual structure" of China's grain pricing. On the one hand, peasants may contract their rights to manage and use land over to other households, but in doing so, such peasants have not transferred all of their rights to land income. Thus if such peasants require subcontracts to pay a certain "price," if subcontractors agree to this "price" and if the negotiated amount falls within the parity price for grain rations, then we should regard such conditions as reasonable. On the other hand, after paying taxes and deductions for the contracted land, the subcontractor may enjoy improved productivity due to an increase in the amount of land he manages or because his newly contracted land has better productive conditions. Thus he may achieve a greater surplus in production, which he may sell at negotiated prices or for which he may obtain price surcharges. He should be allowed to keep the extra income he earns thereby. But to promote specialization of labor and the development of the commodity economy, we must both permit and restrict this type of "compensated subcontracting." We should convince households not to employ compensated subcontracting if the transfer involves only responsibility fields and self-cultivated plots for grain rations. And "unions" should, at regular intervals, conduct readjustment of contract land added due to normal demographic change. If the original contractor applies investment and labor to his land so as to increase fertility, make capital improvement and enhance farming conditions, he reasonably may demand additional compensation when he subcontracts his land. This approach will enable peasants to keep the increment they contribute to land income and will encouarge them to make investment in the land.

IV Lengthening the Contract Period Is an Important Means of Insuring That Land Productivity Is Improved

Most land contracts are effective for 5 years or less. Under this system the contractor can apply animate and inanimate labor and conduct intensive cultivation during the first 2 years of the contract period, but in the last 1 or 2 years of his contract he tends not to be attentive to land conservation, even engages in rapacious farming and is very disinclined to build irrigation facilities, improve the soil and undertake other improvements of a permanent nature. For capital improvement of the land requires large investment and yields results slowly, and thus, with short contract periods, peasants usually cannot recover their investment and certainly cannot obtain any of the increment to land income that their improvements engender.

The most basic method of encouraging peasant households to improve and invest in the land, develop soil fertility and practice intensive farming is to satisfy peasants' desire for longer-term contracts. It is estimated that

extensions to 15 or more years will enable peasants to recover their investment and earn land-income increments that exceed in value the original, natural, differential land income. Such extensions will therefore greatly arouse the enthusiasm of the peasants for land improvement and investment. With contracts of 15 years, peasants can apply, in a planned way, more labor and capital to their fields, carry out permanent improvements, improve soil fertility and thus raise yields and output value and obtain better economic results.

The extension of land contracts differs from the capitalist practice of employing long leases, which enables agricultural capitalists to obtain differential land rent II [as published] and causes contradictions and conflict between land owners [as published] and agricultural capitalists. In China, the improvement of land productivity is consistent with the interests of the state, the collective and the peasant. Extension of land contracts is merely a method by which to avoid irrational distribution of improvement-induced land-income increment and to encourage peasants to make more investment of labor and capital in the land. Thus it is apparent that the notion of "labor," which is supposed to form the basis for distribution, includes both the inanimate and animate labor invested by peasant-household contractors. And at the present stage, we must fully affirm this hybridized form of "distribution according to one's work."

There are several problems that we must bear in mind while extending land contracts.

First, when the contract expires, the original contractor should be given preference if he desires to continue the arrangement.

Second, the extension and stabilization of household land contracts by no means implies that there absolutely can be no change within the 15-year period. Demographic fluctuation, increased specialization and division of labor and changes in the state's procurement assignments will necessitate adjustments at certain intervals. Experience obtained through the improvement of the contract responsibility system in each locality demonstrates that adjustment can be carried out simultaneously with stabilization work.

Third, contract extension should be conducted flexibly and in accordance with the wishes of each household; arbitrary uniformity must be avoided. But to encourage intensive farming, policy emphasis should be placed on the rational distribution of improvement-induced land-income increment.

Fourth, once contracts are extended, some peasant housholds will begin to earn more land-income increment due to increased investment and land improvement. Most of this increment should revert to the contractor. Yet the state or the collective should not be prevented from extracting part of this increment, for such extraction would represent a proper readjustment in accordance with the interests of the entire society or collective.

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REFORM OF AGRICULTURAL PRODUCTS CIRCULATION DISCUSSED

Beijing LIAOWANG [OUTLOOK] in Chinese No 27, 2 Jul 84 pp 18-19

[Article by Cai Xiaopeng [5591 2556 7220] and Diao Xinshen [0431 2450 3947]: "Momentum and Trend--On How To Reform the System Governing the Circulation of Agricultural Products in China"]

[Text] Editor's note: The system governing the circulation of agricultural products being implemented in our country came into being in the early period of liberation when the rural commodity economy was not too well developed. The basic feature of this system is that the state employs administrative means to distribute agricultural products in kinds. With the institution of the production responsibility system since the 3d Plenary Session of the 11th CPC Central Committee, rural commodity production in our country has developed significantly but the channels of circulation remained impeded, with the problems of "having difficulties in buying and selling" faced by the peasants becoming more noticeable. It is now the time for us to reform the old system of circulation for agricultural products. How to reform the agricultural products circulation system, a cardinal matter bearing on the overall situation, has aroused attention in many quarters. This series of articles published by this periodical will give an answer to this question. It is written by men of insight and is based on results of systematic investigation and study.

The characteristics of the agricultural products circulation system currently in practice in our country are: the state monopoly for purchase and marketing of agricultural products, the exclusive manipulation of the market, the establishment of commercial organs according to administrative divisions and levels and the forming of a vertical system of operation by each of the different commercial departments creating barriers between higher and lower levels and between different departments and regions, for example, the grain departments, the state-operated commerce, the supply and marketing cooperatives and the foreign trade departments each has its own vertical system. ... Because the shortage of agricultural products lingered on and the contradictions had concentrated mainly in the production sphere, the drawbacks of this circulation

system remained well concealed for a long time. With the significant development of the commodity economy brought about by the agricultural production responsibility system following the 3d Plenary Session of the 11th CPC Central Committee, this system of circulation formed under natural economic conditions is no longer compatible with the development of the commodity economy and we have no other choice but to reform it.

The incompatibilities of this system find expression chiefly in the following: (1) With the development of the rural commodity economy, the broad masses of peasants are no longer the small producers wanting only a certain decisionmaking power in production but commodity producers wishing to have decisionmaking power in commodity exchange. The state monopoly for purchase and marketing has hampered the peasants in ultimately realizing their decisionmaking power in the process of circulation. (2) The significant development of commodity production has brought about profound changes in the demand and supply of agricultural products. The gross agricultural output value in 1983 was 312.1 billion yuan, an increase of 46.1 percent over 1978, or five times greater than 1949; the total increase in grain output between 1978 and 1983 was 104.55 dun, surpassing the increase in 23 years between 1955 and 1977, or 3.4 times greater than 1949. The amount of agricultural products and sideline products procured during the same period increased at an average annual rate of 17.6 percent. The sharp increase in commodity production and in variety created acute contradictions with this single circulation system of distribution in kind: most products cannot move from production to consumption. As a result, the problems of having difficulties in buying and selling emerged universally throughout the country. (3) With the development of division of labor and division by trades within the framework of the rural economy, interdependence between agriculture and industry and between the cities and the countryside has strengthened continually in the course of social reproduction. In the meantime, the circulation system of distribution in kind can only move up and down in administrative channels. Horizontal economic relations of all types, artificially cut off, will in the end turn this circulation system into a major stumbling block to the development of the rural commodity economy. (4) The purchase and marketing prices are transposed with the purchasing price coming out higher than the marketing price. Originally, this was a special policy adopted by the state to protect the interests of both producers and consumers. But, because the purchasing price is unable to fluctuate with the changes in demand and supply, the amount of state financial subsidies grows larger as agricultural production develops faster. In 1982, the amount of such subsidies exceeded 30 billion yuan. Furthermore, losing money in both purchasing and marketing, the state-operated commercial departments show little enthusiasm, thereby impeding commodity circulation.

The abovementioned incompatibilities also show up the most when the state puts a limit on production and purchase whenever the products are in abundant supply and imposes procurement quotas when the products are in limited supply. Such a practice of not using economic levers and market regulations to solve the contradictions between production and marketing is in violation of the law of commodity economy. Thus, with the agricultural reform, partial reform of the circulation of agricultural products will be a matter of course. This is chiefly reflected in the following areas:

Readjusting the purchase and marketing policy gradually narrows the scope of products for unified and assigned procurement and continually enlarges the scope of free purchase and marketing. Since 1978, the varieties of products that the state procures in quota have been reduced from 46 to 21. In 1983, the state gave permission for long-distance transport of grain and to develop processing in depth. In 1984, government control of cotton and tea leaves has been further relaxed.

Opening up the market step by step practicing multi-channel operations and encouraging the movement of agricultural products directly into the cities.

Proceeding from the five areas of labor, share funds, services, distribution and prices to promoting the reform of the supply and marketing cooperative system in rural areas, the supply and marketing cooperatives can then become true cooperative enterprises collectively owned by the peasants and the people.

Initial effects of these reforms are evident at present:

Market trade flourishes in the urban and rural areas. In 1978 there were 33,000 markets in the rural areas, by 1983 the number had increased to 48,000. The volume of transactions, originally part of the social commodity retail volume increased to 37.9 billion yuan, jumping from 5.4 percent to 10.2 percent.

Initially opening up the multiple channels of commodity exchange between the urban and rural areas. At present, there are about 3,000 trade centers and warehouses set up by units above the county level throughout the country. Many communes (townships) have also set up cooperative commercial organs in general. The number of individual retailers and peasant households engaged in transport and sale now totals well over 5 million. Joint operations, of various forms and levels between agriculture and commerce, between one form of commerce and another form of commerce and among agriculture, industry and commerce have been developed vigorously. In 1983, the total amount of commodities purchased by residents in cities and towns at the agricultural trade markets throughout the country was 2.5 times greater than in 1978.

Embryonic forms of various new types of circulation have begun to appear. Among the most significant ones is the formation and development of wholesale markets for agricultural products. At present there are over 200 wholesale markets of this type in the whole country. The salient feature of this type of market is that is enables the many commercial operators (including some producers) to get together. These commercial operators not only can engage in state commerce and collective commerce, but also in individual retailing, or peasants themselves can engage in both agriculture and enterprise. The enterprise can either be wholesale or retail, a processing or a service enterprise. By choosing freely who they trade with, what they trade and at what price, these commercial operators can engage in commodity exchange on a voluntary and equal basis, allowing no coercion and monopoly transcending the economic scope.

The economic results achieved through all these partial reforms are considerable. As seen from Guangdong, since the circulation of citrus fruits, fresh fish and native and specialty products was related, production has been greatly developed, commodities are now in abundance in the market, financial losses have diminished and demand and supply are beginning to be in balance. Judging from the trends in market price fluctuations in the urban and rural areas throughout the country, except for the market for aquatic products in which demand has exceeded supply in the past 2 years, the increase of negotiated prices and market prices of commodities has not exceeded the range of increase of the state list price and the gap between the negotiated price and the state list price is narrowing. This shows that prices have begun to play a regulatory role in striking a balance between demand and supply.

Summing up the reforms in the past several years, we can see that the key to reform lies in eliminating the administrative and the distributive defects in the circulation system. The state monopoly for purchase and marketing is the foundation of this system. As long as the state monopoly for purchase and marketing exists, it will be very difficult to thoroughly change the structure and the system of management. As a matter of fact, any reforms carried out in the area of circulation in the past several years were all carried out under the premise of readjusting the purchase and marketing policies. Starting a reform in the state monopoly for purchase and marketing will shake the old circulation system of agricultural products to its very foundation. For example, the purpose of developing a wholesale market for agricultural products would be to put together an organizational structure to replace the current circulation system. The wholesale market, breaking through the administrative relations and layers in the wholesale links, would create objective conditions for the commercial enterprises to put their operational relations on an equal footing.

As the reform of the circulation system progresses step by step, the enterprises have truly become the operational entities in the process of commodity exchange, the methods of planning and the means of market management by the state are also undergoing changes. On the one hand, the state will gradually withdraw its participation in certain circulatory processes and on the other hand it will strengthen, step by step, regulatory leading organs of law and policy, the supervision and the management of the functioning departments, and readjust and intervene by economic means in order to carry out a planned, socialist, commercial circulation.

The reform of the circulation system for agricultural products must be pushed forward in a planned manner and by stages under the specific conditions in our country at present so as to achieve the best social economic results without paying a costly price and with the least impact.

So long as we ascertain our objectives and take appropriate measures, we can speed up the reform and put economic relations in order, open up the channels of circulation and widen the markets for agricultural products, thereby creating conditions for circulation and marketing to sustain continued growth in China's industrial and agricultural production.

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'PEASANTS' LIVING STANDARD GREATLY IMPROVED

OW150436 Beijing XINHUA Domestic Service in Chinese 0738 CMT 10 Oct 84

["Feature report by XINHUA reporter Ma Chengguang: A Look at the Chinese Peasants to Today"--XINHUA headline]

[Excerpts] Beijing, 10 Oct (XINHUA)--During the celebrations of the 35th anniversary of the founding of the PRC, marching at the front of the mass parade in Beijing was a large group of peasants who have taken the lead in carrying out economic reform. Hoisting a huge banner that read "Output-related contracts are fine" and wearing stylish business suits and leather shoes, they entered Tiananmen Square, glowing with happiness and radiating vigor. What style!

That is an epochal change, showing that Chinese peasants, inspired by the spirit of the 3d Plenary Session of the 11th CPC Central Committee and after several years of hard work, are saying goodbye to poverty and ignorance, breaking with the longstanding influence of "leftist" ideas and traditional concepts thousands of years old, and building a socialist new countryside with their wisdom, intelligence, and hard work.

Guided by the various rural policies adopted since the 3d Plenary Session of the 11th CPC Central Committee, Chinese peasants have smashed the system of "eating from the same big pot" and have changed the practice of growing nothing but grain, and have replaced them with family-based output-related contracts and economic diversification. Today the outlook for China's rural areas is changing rapidly. Enromous changes have also taken place in these areas' production structure and labor composition. Across the country, over 30 million peasants have joined the work force of township or town enterprises. Over 5 million have joined the building trade and thousands upon thousands of peasants have joined the work force in commodity circulation and the catering trade. Approximately 6 million rural families in the country have become households specializing in breeding livestock and each family's income from breeding livestock has reached as high as over 10,000 yuan annually. They are changing people's diet with their increasing supply of meat, milk, and eggs.

Following the rapid development of commodity production and economic diversification in the rural areas in recent years, more and more peasants have come to realize that science is productivity, and wisdom and time mean money. They have therefore been eagerly learning and applying modern science and technology so that now the study of scientific knowledge has become a "craze" in the rural areas. According to statistics, the nation has now over 3,000 county-sponsored technical schools and centers for peasants and adults and over 14.9 million people are attending evening technical training classes set up in more than 240,000 villages or teams.

Thanks to the series of reforms carried out after the 3d Plenary Session of the 11th CPC Central Committee, the rural areas have become a vast world where the peasants can give full scope to their wisdom and intelligence. The peasants are no longer bound by land. Capable farmers have contracted more land for their family farms, which are operated with modern methods. Skillful craftsmen have become workers or businessmen, giving full scope to their capabilities. A large number of people who used to be considered "country bumpkins" have now become "peasants-turned-entrepreneurs" or businessmen handling big businesses involving hundreds of thousands or even millions of yuan. Some large business households not only have installed telephones, but have also hired fulltime secretaries, technicians, buyers, salesmen, or information collectors. Some have even hired college students to work for them. Five years ago, these people were still peasants toiling for food. Today they have become entrepreneurs making important decisions and doing busines with faraway places.

Hardpressed by poverty in the past, Chinese peasants were out of breath in just making a meager living. Things are different now. Today affluent Chinese peasants have a much broader vision, their thinking is much livelier, they have become more capable and are interested in many things, and they have high hopes for the future. In order to run their businesses more efficiently, some have taken study tours to other provinces or countries to broaden their knowledge. To publicize the development of their production, affluent households engaged in specialized production in Qianxi County, Hebei, and held receptions for the press. Some 300 affluent young peasants of Duanlizhuang village in Jia County, Hena, had a fashion show; peasants in Liling County, Hunan, formed a band to enrich their cultural life in the mountainous areas; 100 young men in northern Jiangsu's rural areas sent letters to ZHONGGUO FUNU [CHINESE WOMEN], asking city girls to marry them; and peasants in Qing County, Hebei, insisted on donating 10,000 yuan to the Tianjin Youth Center. Their reason was: "We have become affluent!"

BRIEFS

FARM MACHINERY INCREASE--From 1949 to 1983, the number of farm tractors, combines, and farm automobiles increased from 401 to 3,591,000 from 13 to 35,000 and from 28 to 275,000 respectively. Nearly nonexistent before liberation, rice, flour, edible oil, and cotton processing machines numbered 3.72 million and stock breeding machines, 1.3 million in 1983. Mechanized farming acreage totalled over 500 million mu, or 34.1 percent of China's total acreage of cultivated land, and 380 million mu of farmland was under power irrigation, or 56.6 percent of the total acreage under effective irrigation at the end of 1983. The total horsepower of all these farm machines was 245 million. [Summary] [Beijing XINHUA Domestic Service in Chinese 0738 GMT 25 Aug 84 OW]

TRANSPROVINCIAL AFFAIRS

READ IUSEMENT OF STRUCTURE OF AGRICULTURAL PRODUCTION

Beiling NONGYE JINGJI WENTI [PROBLEMS OF AGRICULTURAL ECONOMICS] in Chinese No 4, 23 Apr 84 pp 22-25, 16

[Article by Du Yintang [2629 0692 2768] of the Institute of Economics, Academica Sinica: "The Readjustment, Changes, and Trends of the Structure of Agricultural Production in 112 Counties"]

[Text] I. Basic Situation and Characteristics

According to preliminary statistics from the State Economic Commission, between 1978 and 1983, 112 counties in the country increased their gross agricultural output value by more than 100 percent. These 112 counties are located in 19 different provinces (cities and autonomous areas). Among them, eight prefectures have doubled gross agricultural output value throughout their territories. Two cities prefectures and 15 counties have quadrupled gross agricultural output value and total grain yield.

These 112 counties accounted for 5.4 percent of all the counties in the country. Their populations accounted for 5.7 percent of the total population. The area under cultivation in these counties accounted for 7.6 percent of the total cultivated area of the whole country. Their gross agricultural output values made up 8.6 percent of the gross national agricultural output value. Their grain yields accounted for 9 percent of the gross national grain yield. Their cotton yields accounted for 24.9 percent of the gross national cotton yield, and their oil outputs accounted for i4.4 percent of the gross national oil output. These 112 counties have the following characteristics:

First of all, they have relatively quick development rates. Of these 8 prefectures and 112 counties, 1 prefecture and 47 counties doubled their outputs from 1974 to 1982. Seven prefectures and 65 counties doubled their outputs within 5 years (from 1979 to 1983). Compared with 1978, the average increase rate of gross agricultural output value in 1983 was 135.5 percent; this is about three times the increase rate of the gross national agricultural output value during the same period; 54.6 percent of these counties had a 100 to 130 percent increase rate, 18.7 percent had a 130 to 150 percent increase, and 26.7 percent had a 150 percent increase. The gross agricultural output value of eight of these counties increased by over 200 percent. Lixian County in Hebei Province increased by 290 percent, coming close to quadrupling its output.

Secondly, the geographic distribution of these counties is centralized; 80 percent of the 112 counties are spread among the 8 provinces (autonomous regions) of Hebei, Shandong, Henan, Shanxi, Anhui, Liaoning, Jilin, and Inner Mongolia. Among these, 4 provinces, 5 prefectures, and 63 counties doubled output in Anhui, Shandong, Henan and Shanxi. They accounted for 56.25 percent of all the counties which doubled their output. In Jilin Province, Liaoning Province, Hebei Province, and in Inner Mongolia (Autonomous Region), there were 3 prefectures and 26 counties that doubled their outputs. They accounted for 23.21 percent of the total counties which doubled outputs. The rest of the counties that doubled output, 21.43 percent, were distributed in 11 provinces (cities and prefectures). They reached from the Jiayin County in Heilongjiang Province in the north, to Nanhai County in Guangdong Province, and to Qionglai County in the Sichuan basin to the south.

Third, before 1978, per-capita gross agricultural output value was in the lower middle range. In 1978, according to the statistics from 104 counties concerned, 83 percent of them had a gross agricultural output value of under 300 yuan per capita. Fifty percent of them had under 200 yuan per capita, and only around 3 percent had more than 400 yuan per capita. Based on the doubling of output, Nanhai County in Guangdong Province had the highest output of all counties; its gross per-capita agricultural output value was around 564 yuan. Xijiao Ward of Tianjin Municipality came next with a 558 yuan per-capita gross agricultural output value. Of these 112 counties, Shaoxing County of Zhejiang Province was the most densely populated and it had the highest level of permou grain yield. There was only 0.6 mu of cultivated area per capita, but the country's per mu grain yield reached 1,600 jin.

The above three situations show that, because of different natural and economic conditions, and because of different agricultural-production base figures, different areas doubled their outputs on different scales and at different speeds. With medium and low output conditions, northern areas can realize the doubling of their agricultural output. It is also possible for areas along the southeast coast to have higher agricultural production levels in order to double their outputs.

2. Types and Effects of Readjustments in Production Structures

The basic lesson we can draw from the experiences of these counties is that the stabilization of a perfect production responsibility system was a prerequisite for what they did. From a realistic viewpoint, they brought into full play the economic superiority of their own areas, they readjusted the structure and the layout of their agricultural production, they vigorously developed commodity products, they promoted and applied scientific and technological results, and they improved the conditions for agricultural production. Of all the above steps, the key measure was the readjustment of the structure of agricultural production in order to double gross agricultural output value. There are three basic ways the different areas went about doing this.

First, the development of sideline industries was a breakthrough for some counties. Characteristically, sideline industries develop at a faster pace and occupy the largest proportion of the increased volume of gross agricultural

output. For example, sideline industries product and other kinds of enterprises of Xijiao Ward, Tianjin Municipality (a suburban county of a big city). were already relatively flourishing before its agricultural output doubled. These enterprises have developed further in recent years. Among them, Jin Commune Brigade enterprises have expanded from an original 12 categories and 41 kinds of industries to 15 categories and 69 kinds of industries. These include food service, transportation, construction, tourist services, different kinds of product processing, repair services, and rural businesses, Products that have entered the international market include those from the chemical industry, the light and textile industries, as well as those from the hardware, the agricultural by-products, and the small commodities industries. Nanhai County of Guangdong Province is different from the Xijiao Ward of Tianjin. Nanhai's favorable proximity to Hong Kong is utilized to develop various forms of sideline industry production such as the processing of imported materials, the assembling of imported parts, the filling of orders from samples, as well as compensatory trade, and joint-venture factories. The county has earned more than US\$ 18 million worth of remittances in 3 years. It has also created new paths for farmers to become wealthier.

Shaoxing County Zhejiang Province is situated on the southern coast, an economically flourishing area. It has a long history of local manual industries such as liquior making, dyeing, and textiles. In recent years, the development of light and textile industries has been highlighted. By the end of 1982, 938 textile mills had been set up. Their gross output value was 3 million yuan, realizing the linking up of the printing, dyeing, and garment industries. As a result, the light and textile industries have become the principal part of the county's economic system. In terms of production, Lixian County in Hebei Province was one of the lesser developed counties in Northern China before it doubled its output. Average per-capita income was 40 to 50 yuan. Since 1978, the county has set up 8,000 county-owned flat knitting machines. The knitting industry has produced almost 20 million acrylic garments annually. In 1982, the net profit of acrylic fibre products reached 43.64 million yuan. The average per-capita income based on the agricultural population was 124 yuan.

Before doubling their output, most counties in Yanbei Prefecture, Shanxi Province, had very low production level. Among them, Pinglu County had an average per-capita income of 20 yuan in 1978. It had the lowest base of all counties which had doubled their outputs. Since 1979, the county has brought into full play the superiority of local coal resources and has set up more than 200 small commune-brigade-run coal pits and has produced more than 30 million tons of raw coal, creating nearly 250 million yuan in net profits. Other lines of industries and businesses were brought along by the development of small coal pits. In 1983, the average per-capita income in Pinglu County reached 273 yuan, a 12.6-fold increase over that of 1978.

For the above counties which have doubled output, the value of their increased output brought about by the development of industrial sideline production is about 40 to 80 percent of the increased value of their gross agricultural output. At the same time, the fast development of sideline industries production has also brought different degrees of changes to other businesses and industries. For example, in Nanhai County planting did not occupy a big

proportion of the increase in gross agricultural output value, but changes have occurred in management. The county emphasizes superior quality vegetables and fruits which they produce for export; 42 kinds of fruits and vegetables have been exported, and 26 kinds have been produced against their seasons (which means fruits and vegetables are produced during their off seasons). Lixian County in Hebei Province and Yanbei Prefecture in Shanxi Province have turned their profits made from sideline production over to agriculture, and they have expanded their investments in agriculture. As a result, grain production has broken away from low production conditions, and has brought about the development of other industries and businesses.

Second, these counties have concentrated on readjusting the internal structure of their cultivation industries in two principle ways: The first way required readjusting the ratio between grains and industrial crops, and concentrating on a few industrial crops. For example, Dezhou and Liaocheng Prefectures in Shandong Province stabilized their grain production while at the same time expanding their cotton production. Dezhou Prefecture has expanded its cotton cultivation area 1.9 times, from 1.5 million mu in 1978 to 4.37 million mu in 1983. Gross yield was increased 15.25 times from 390,800 dan to 6.35 million dan. At the same time, grain cultivation area dropped from 7.25 million mu to 5 million mu, but the gross yield volume increased 49.68 percent, from 3,025,660,000 jin to 4,528,760,000 jin. In Liaocheng Prefecture, before 1979, the area for cotton cultivation was 1.8? million mu. It was expanded to 4.2 million mu in 1982. In 1978, the gross yield volume was 740,000 dan. In 1982, it was increased to 4.78 million dan. The increase was 5.5 times. Cultivated area for grains was reduced by over 2 million mu, but the gross yield value had a 6 percent increase, from more than 2.53 billion jin in 1978 to 2.698 billion jin in 1982. After readjustment, the ratio between cultivated areas for grain and cotton was close to one-to-one. Cotton yield value accounted for a large part of the gross yield value.

A further example is the Bayannan League of the Inner Mongolia Autonomous Region which stressed the development of sunflowers and beets when readjusting crop structures. Cultivated area for sunflowers has increased from 60,000 mu to 1.213 million mu (including 800,000 mu of non-cultivated area). Cultivated area for beets has increased from 180,000 mu to 301,000 mu. After readjustment, the ratio between grain and industrial crop cultivation changed from 81-to-19 to 75-to-25. Sugar and oil output values have accounted for over 30 percent of the gross agricultural output value.

Another kind of situation is the readjustment of internal structure and the rotation of grain crops in order to concentrate on major grain crops. For example, Tanghe County, Sheqi County, and Fugou County in Henan Province, as well as Fengyang County and Chuxian County in Anhui Province started with the development of oil crops, reduced their areas for autumn grain crops, and concentrated on wheat production. Historically, the cultivated area for summer crops in Tanghe County, Henan Province, accounted for only about 46 percent and fall crops accounted for about 54 percent of the total grain area. Droughts and waterlogged conditions occur quite often in summer and fall, and as a result, the grain yield was low and unstable for a long time. In the process of crop readjustment, they increased the area shown

for early rotation wheat from 60 percent to over 85 percent. As a result, the per-unit-area yield for summer crops was upgraded 1.66 times, from 219 jin in 1980, to 574 jin in 1983 (this of course, includes technological factors as well). The gross output volume has increased 1.72 times, from 274 million jin to 746 million jin. The proportion of summer grain in the gross annual grain yield rose from 50 percent to 70 percent. Because the net per-mu profit for wheat reached around 100 yuan, and because it is higher than that for other grain crops, economic results have been upgraded.

Siping Municipality in Jilin Province and Changtu County in Liaoning Province, on the other hand, concentrated on grains and beans. High yield crops such as corn became the focal point for development. In 1983, the corn and sorghum area in Siping Municipality and Shuangliao County increased by 13 percent over the area of 1982, and oil crops area decreased by one-third. The cultivated area for corn accounted for about 70 percent of the total cultivated area in the city. With the help of other technological measures, the grain and bean gross yield volume increased 1.3 times over that of 1978. Chengtu County, on one hand, turned part of its sandy and alkaline soil over to the cultivation of oil crops, and on the other hand, expanded the corn area in the plains and hilly land from 48.7 percent of the total cultivated area to 58.9 percent of the cultivated area. Through the readjustment of structural and layout arrangements, corn has become the major crop in this area.

The above counties that doubled their output by increasing the value of output derived from the development of their planting industries accounted for about 80 percent of the increase in the volume of gross agricultural output value, while other industries accounted for a lower proportion. Through the readjustment of the internal structure of the planting industry, the commodity rate of agricultural products has been upgraded. One such case is in Shandong Province where the commodity rate of agricultural by-products reached 67 percent in Liaocheng Prefecture and reached 59.5 percent in Dezhou Prefecture. The grain commodity rate in Chuxian Prefecture, Anhui Province, reached 53.96 percent, while that for Siping Municipality and Changtu County, Liaoning Province, reached 64.4 percent respectively.

Third, some counties concentrate on planting industry and stress the development of sideline industrial production such as forestry and animal husbandry. These counties are usually situated in mountainous or in hilly areas, and therefore possess the resources for forestry and animal husbandry development. For example, Kelan County, Shanxi Province, and Changling County, Jilin Province, have under the premise of stabilizing their planting industries emphasized planting trees and grass as well as promoting the development of animal husbandry. Kelan County implemented the guiding principle of "put animal husbandry first, undertake both forestry and animal husbandry, and develop oil crops to achieve food self-sufficiency." In 4 years, the county created 129,500 mu of forest and planted 34,300 mu of grass. In 1982, the number of big livestock raised increased 13.4 percent over the number in 1978. Every household unit had an average of one animal, and raised over 10 sheep. From 1978 to 1982, cultivated area in Changling County was reduced from 3.8 million mu to 2.7 million mu. This 1.1 million mu difference was returned to forestry and animal husbandry use. After readjustment, there

was an average of 3.8 mu of forest land, and an average of 1.2 head of big livestock and 1.8 head of sheep per household unit. Compared with 1978, in 1983 the output value of the forestry industry increased 3.8 times, animal husbandry increased 1.9 times, and sideline industrial production increased 2.2 times.

Zhucheng County, Shandong Province, implemented the combination of agriculture, industry, and animal husbandry. They readjusted the internal structure of their planting industry, and at the same time, speeded up the development of animal husbandry, and the development of processing industries for agricultural and animal husbandry products. They implemented comprehensive utilization (and multiplied their output value several times). Every year, the whole county spent 300 million jin of grain and 500 million jin of forage grass on the development of animal husbandry, and turning grain into meat, eggs, milk, fur, and wool. They spent 60 million yuan of capital to create 100 million yuan of income, an increase of 40 million yuan.

Some counties have adopted the guiding principle of comprehensive development. Since 1979, for example, of 290,000 mu of total cultivated area, Jinjiang County has taken out 32,000 mu to develop economic crops like cotton, limonene, watermelon, and ginger. They have taken 15,000 mu of hilly land for tea and fruit plantations, and 1,600 mu for fisheries. They took water area of 50,000 mu which was reclaimed for cultivation, and turned it into a place to raise aquatic products. Within the planting industry of Juxian County, Shandong Province, the proportion of total cultivated area cultivated for economic crops such as cotton, peanuts, and aztec tobacco was upgraded from 24.8 percent to 35.4 percent. Afforestation area was expanded from 35,000 mu to 48,000 mu. The breeding of cows, sheep, pigs, chickens, rabbits, marten, and fish was developed and the animal husbandry output value increased by 147.1 percent between 1978 and 1982.

As for the increase in gross agricultural output value among these counties which doubled their output, the planting industry generally accounted for 60 percent of the growth, and the sideline industries production accounted for 15 to 20 percent. The proportions for forestry and animal husbandry in these counties was higher than in other areas.

3. The Trend of Changes in Production Structures

After a series of readjustments, there has been a rather big change in the agricultural production structures of counties which doubled their outputs.

First, there are changes in the structure of product value for which there are three kinds of situations.

The first kind of situation is that of the sideline industries production which developed at a faster speed in some counties, a situation similar to that in the first type of county mentioned above. In them, that proportion of five-industries gross output value held by sideline industries was distinctively upgraded, and that held by planting was obviously decreased. Nanhai County in Guangdong Province, Xijiao Ward in Tianjin Municipality, Shaoxing in Zhejiang Province, and Lixian County in Hebei were typical cases. Before

Nanhai County and Tianjin Municipality's Xijiao Ward doubled their output, the proportion held by their sideline industries had already reached 50 percent of the five total output value for five industries. After readjustment, the proporation was upgraded to around 70 percent. These counties occupied an absolutely dominant position in the rural economic structure. Before Shaoxing in Zhejiang Province and Lixian County in Hebei doubled their outputs, the proportions held by their sideline industries accounted for around 30 percent. After readjustment, it was upgraded to over 50 percent, and the trend was that they have gradually moved into a dominant position.

The second kind of situation is that in which, among certain counties, the structure of the planting industry was readjusted, while several big economic crops were developed at a faster pace. The second type of counties that were mentioned earlier are examples of this. Generally speaking, the proportion of planting industry output value in the gross agricultural output value was further upgraded, while there was not much change in the proportion held by sideline industries. The proportion of forestry and animal husbandry was lowered by varying degrees. For example, before Dezhou Prefecture in Shandong Province doubled its output, the planting industry accounted for 63.6 percent of the gross agricultural output value. When the prefecture doubled its output, this proportion was increased to 76.5 percent. Before Huaxian County in Henan Province doubled its output value, its planting industry accounted for 71.8 percent, and this proportion rose to 79.9 percent after a doubling of output value.

The third kind of situation is that in which some counties put planting industry first, and in which they also stress the development of forestry, animal husbandry, and sideline industries. The ratios accounted for by each industry shifted by small amounts, and there were no abrupt changes in the whole agricultural production structure.

Second, there were changes in the employment structure of the rural labor force. These changes happened mostly in areas where sideline industries developed at a fast pace. For example, over the years, the farmers in the Xijiao Ward, Tianjin Municipality, have accumulated over 77 million yuan to run sideline industries, and they have absorbed almost 50 percent of the labor force from rural areas, 90 percent of them were educated young people from rural areas. People employed in the Ward's commune brigades increased from 21,970 in 1978 to 55,897 in 1983. They accounted for 49.9 percent of the total full-time and part-time rural labor force, and 64 percent of the farmer's average per-capita income came from sideline industries. In 1982, Shaoxing County in Zhejiang Province had a full and part-time labor force of 52,000 persons, 12,000 of whom worked for commune brigade enterprises accounting for 23 percent of the total labor force. Commune-brigade-run industries accounted for 37.1 percent of the collective-distributed income for commune members, and 70 percent of the commune workers were women. During agriculture's idle seasons, women worked for industries, while during the busy seasons they worked in agriculture. They became workers holding concurrent posts. Lixian County in Hebei had a rural population of 35,000 people, 15,000 of whom were in the rural labor force. In the development of sideline industries, a promotion team comprised of persons from over 40,000 farms was formed: the

the farms accounted for 11.4 percent of the rural population. The number of people engaged in sideline industries in Nanhai County, Guangdong Province, increased from 72,000 in 1978 to 136,000 in 1983; their proportion of the total labor force increased from 19.8 percent to 35.8 percent. The structural change in the labor force showed that sideline industries have gradually become major elements of the industrial structure of these areas.

There were also changes in the land resources utilization structure. These happened mostly in areas where forestry, animal husbandry, and fisheries were developing at a faster pace. In Jiujiang County, Jiangxi Province, there were 293,500 mu in cultivated area, 482,000 mu in forests, and 155,000 mu in water-covered areas. When only engaging in the management of grain cultivation, there were only an average of 1.2 mu per capita of cultivated area. After forestry and fisheries were developed, not only were usuable resources increased, but the structure of land utilization was also changed. Low-yield cultivated areas were returned to forestry and fisheries use, and economic results were upgraded. The above-mentioned Changling County in Jilin Province gradually formed, by returning cultivated areas to forestry and grassland (meadowlands), a land utilization structure in which agriculture, forestry, and animal husbandry each occupied one-third of the whole.

In summary, production structure changes in those counties which doubled their output reflect the following characteristics: In economically flourishing counties, natural resources were relatively developed and utilized, and multi-faceted management was developed in a comprehensive way. Sideline industries have gradually become the major means by which rural economies flourish, and by which farmers increase their incomes. Some counties in remote and mountainous areas have big natural resource potentials. Different businesses have been developed to different degrees, but most of them are still at the beginning stages, and have not yet been developed into large-scale commodity producers. Counties that have taken as their principal policy measure the readjustment of planting industries' internal structure have mostly achieved breakthroughs in several economic crops. The scale of commodity production was expanded and these counties have gradually become the production bases for certain major crops. There are also some counties where multifaceted management has developed at a slower pace, and there have not been many changes in their production structures. These counties have not broken through their sealed-off circumstances in which grain is the major crop of a self-sufficient agriculture.

At present, in the counties that doubled their output, some problems exist in the structural changes of their agricultural production. 1) The two leaders in the development of the five industries are planting industries and sideline industries. Forestry, animal husbandry, and fisheries are weaker links.

2) Production varieties in all industries develop at a fast horizontal pace while vertical developments move more slowly. Examples of the latter are pre- and post-production multi-level processing, transportation, sales, storage, and technological services. 3) After the development of multi-faceted management, some products experienced different degrees of overstocking and slow sales. The causes of all the above are very complicated. However, product suitability and the improvement and replacement of types of products are important facets of these problems.

Because of the development of our rural commodity production, sideline products that directly affect farmer income fluctuate with price changes and with market demands (including the demands of urban and rural consumption and the demands of production consumption). Price changes and market demands have gradually become the two most important factors in regulating changes in production structure. Under their influence, some new trends appeared in the changes of production structure for counties which have doubled their output. For example, in Shandong Province, in some of the counties where cotton was the major crop, they decreased the cultivated area for cotton when it became overstocked, and they developed other businesses and sideline products. When local and overseas markets for tea became saturated, Shaoxing County in Zhejiang Province cut down the number of tea plantations, and started growing orange trees. After 1982, the Xijiao Ward of Tianjin Municipality lowered the pace of sideline product development. In 1983, Xijiao's annual output value increase reached only 7.1 percent, but the pace of the development of other industries increased. Among them, agriculture increased by 11 percent, forestry and fruits increased 70.4 percent, animal husbandry and other businesses increased by 32.8 percent, and fisheries increased by 42 percent. These conditions show that the readjustment of the production structure has not stabilized in many areas, which are still in the process of further readjustment.

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QUESTIONS CONCERNING ORIENTATION OF AGRICULTURE

Beijing NONGYE JINGI WENTI [PROBLEMS OF AGRICULTURAL ECONOMICS] in Chinese No 6, 23 Jun 84 pp 4-6

[Article by Yang Xiandong [2799 7359 2639]: "Observations on Agriculture from a Study Tour"]

[Text] As fall deepened into winter last year, I visited 26 counties (municipalities) in Hubei, Henan, Jiangsu and Anhui Provinces, calling on communes, brigades, professional contingents, key households, peasant families and agricultural research units. The overall impression was that things were shaping up better than expected. I saw a new prosperity prevail in the nation after the third plenary session of the llth Central Committee of the Chinese Communist Party. Let me now summarize my observations on agriculture as follows:

1. DRY RICE CULTIVATION HAS BEEN WELL RECEIVED. Dry rice was introduced in China over ten years ago and we have learned a great deal which is valuable about it. In 1983, at the joint invitation of the Chinese Academy of Agricultural Sciences and the Henan Academy of Agricultural Sciences. Professor Seichi Akamatsu, a Japanese dry rice expert, conducted an experiment on the mechanization of dry rice planting at the Dongwanchuang Production Brigade in Xinxiang, thus further enriching our dry rice experience. The experimental plot covered 100 mu and yielded a bountiful harvest of 802.5 jin per mu. On two mu of the plot, Prof Akamatsu's methods were followed exactly: paddy rice seeds were broadcast on unploughed fields from which wheat had been harvested. The yield per mu here reached 968 jin. Add this to the earlier wheat crop and you have yields of 1,618 jin and 1,784 jin respectively, which exceeded the local per mu production by more than 400 jin.

The special feature of Japanese dry rice cultivation is total mechanization. The early wheat crop is harvested by combines, the land is tilled by rotary cultivators, and the rice is sowed by planters. Weeding is also done chemically. Complete mechanization saves a great deal of time, labor and especially water since it needs only one third of the amount of water required by conventional rice cultivation. Its yield and value, however, are far superior to those of the latter. In addition, dry rice can solve the problem of rice shortage in a locality and has proved very poular among

the masses and with the leadership at all levels.

2. WE SHOULD BEWARE OF THE BIAS FOR CHEMICAL FERTILIZERS AND THE NEGLECT OF ORGANIC FERTILIZERS. Wherever I went, I noticed an urgent demand for chemical fertilizers. Some people even thought that farming would be impossible without chemical fertilizers. We certainly need chemical fertilizers, but not exclusively. If we use too much chemical fertilizers and upset the the proportion between the two kinds of fertilizers, not only will this practice militate against increasing production, but it will also have the side effect of damaging the soil structure. This truth has been borne out by many localities.

Henceforth, even as we develop chemical fertilizers, we must pay more attention to opening up additional sources of organic fertilizers. We must work hard to develop the livestock and husbandry industries, step up the production of green manure, promote crop rotation with legumes and grass, and like many countries in the world today, make great efforts to increase the organic matter in the soil. In both the United States and Japan, stalks are being returned to the land to preserve its fertility.

- 3. WE MUST EMPHASIZE AND IMPROVE TECHNICAL CONSULTING AND TECHNICAL CONTRACTING. With the adoption in rural areas of the contracted responsibility system for joint production, peasants need technology badly. Scientific associations, societies and research units everywhere are disseminating agricultural technologies through contracting, training courses and the establishment of scientific demonstration households. While these practices have increased production markedly, some problems still remain:
- 1) In some localities, the more senior a technical worker is, the more unwilling he becomes to work on contract. He is chiefly concerned about its riskiness. People take for granted production gains resulting from a contractural arrangement, while a drop in production would mean a loss of face and money for the technical worker. Better to concentrate on scientific research. If one can come up with some discovery and write a research paper or two, one may even win an award.
- 2) The masses have been asking too much from contracting. For instance, cotton growers in Hubei Province demanded 100-120 jin of ginned cotton per mu, enough to deter any technical personnel whose skills are less than masterly.
- 3) There have been instances in which technical workers who had fulfilled a contract or even exceeded the targets were not rewarded. Some peasant households hide the rise in yields while others try to fob the technical workers off with one or two bottles of wine a chicken, instead of paying them in kind or in cash as stated in the contract. Even state-operated units are guilty of such practices. The agricultural institute in Zingzhou Prefectures signed a contract with the Jiangling seed multiplication farm to breed cotton variety 3292, an improved variety. The institute did an excellent job and should have been paid over 30,000 yuan by the seed farm in

accordance with the contract. The farm, however, stubbornly refused to honor the contract.

4. PEASANTS ESCHEW COTTON CULTIVATION IN FAVOR GROWING GRAIN. As cotton growers in Hubei and Anhui provinces told it, one mu of cotton was worth three mu of grain in the past but is worth less than one mu of grain these days. Feelings ran even higher in low-yield cotton-growing areas. In Jingzhou Prefecture in Hubei Province, one mu nowadays yields 80-100 jin of cotton. The figure for Linan Prefecture in Anhui is 50 jin. As long as the cotton crops drop below 120 jin and 80 jin per mu in Zingzhou and Linan respectively, the public is not willing to grow the crop.

Apart from revising price policies, we must vigorously increase cotton production, economize on human power and reduce costs.

- 1) To focus on the waterlogging problem in the cotton fields of Hubei and Anhui Provinces, we must coordinate the building of irrigation canals and ditches, select flood- and verticillum wilt-resistant cotton varieties, solve the degeneration problem in mixed improved varieties, and boost production per unit of area by actively popularizing the use of a thin layer of soil as a ground covering, and seedling transplanting.
- 2) To make cotton cultivation less labor-intensive and therefore less costly, we should try to eliminate pruning and cultivating. Liuzhuang Reduction Brigade in Xinxiang County, Henan Province, had done away with cultivating and pruning in the cultivation of cotton for many years. The Henan Academy of Agricultural Sciences and the suburbs of Zhengzhou have also conducted experiments on non-pruning. Many cotton fields in Donglu County, Hebei Province, have done away with cultivating, too. As a result, production has risen (despite reduced yields here and there, which were minor), and inputs per mu have been cut considerably.
- 5. "BEING A FARMER IS NOT AS GOOD AS BEING A CRAFTSMAN, AND BEING A CRAFTSMAN IS NOT AS GOOD AS BEING A BUSINESSMAN." According to peasants in Gaiyang County, Hebei Province, it does not pay to grow cotton these days because there are too many "levies": allowances for cadres, and miscellaneous subsidies to finance the training of the people's militia, abortions and tubal ligations, water conservancy projects and maintaining law and order. In addition, allowances have to be paid to rural doctors and teachers at locally-operated schools. The average burden on one mu of land is 30 yuan, or 50 yuan per capita. The peasants say, "Being a farmer is not as good as being a craftsman, and being a craftsman is not as good as being a businessman." Today, a majority of young people tend to go into business, while farming is mostly done by women, children and the elderly.
- 6. THE PROBLEM OF LAND ABANDONMENT. Much land has gone out of cultivation. According to reports from Jingzhou Prefecture at least 10,000 mu of land were allowed to lie idle in 1983, primarily in Jingmen and Gongan Counties, and secondarily in Gaiyang County. First, the burden on peasants is so

onerous that it discourages them from farming. Second, it is difficult both to acquire the means of production and to sell farm produce. Third, a farmer makes far less money than a craftsman or one who engages in sideline production.

People who let their land lie idle fall into the following categories:

1) key households and specialized households who engage in industry, sideline production, and economic diversification; 2) people who have gone into business; 3) the families of cadres, workers and soldiers, who are living in rural areas; 4) rural families who are in economic distress; 5) people who moved to the lake areas only to return because there was too much land and the work was too labor-intensive; 6) people whose land is situated too far from their homes; and 7) households whose land has been affected by natural disasters, such as households with water-logged fields.

Gaiyang County has adopted the following measures to tackle these problems:

1) lessen the burden on peasants by trimming the percentage of farm produce to be delivered to the county from 13 to 10 percent, reducing non-production personnel, readjusting water-conservancy costs, and extending the repayment period for low-interest loans; 2) include in the contract the amounts of fertilizers and diesel oil supplied; 3) increase the number of purchasing stations and purchasing personnel, and lengthen the purchasing period; 4) return to peasants the profits of industrial sideline production; 5) foster specialized households by allowing them to work an appropriate amount of land. There are now eight such households, each farming over 100 mu.

Farmland abandonment by peasants will intensify in the wake of the advancement of science and technology, the development of rural enterprises, culture and education, the storage, transportation and service sectors of the economy, and the movement of the rural labor force. To deal with this new situation, we must first and foremost speed up the development of specialized households in rice, cotton, dry mixed grains, horticulture, specialized local products, and breeding, thereby joining scattered pieces of land. The experience of the eight specialized grain households in Gaiyang County practically demonstrates that land concentration, done properly, contributes to the popularization of agrotechnology, the development of commodity production, the achievement of prosperity by hard-working peasants, and the prevention of land abandonment.

7. SOME ISSUES CONCERNING ORGANIZATIONAL REFORM. 1) Organizational reforms have been accompanied by the elevation of young intellectuals to leadership positions at all levels. While this is a good phenomenon, there are two comments. First, we should pick generalists, not professional experts in scientific research, as leaders. But since experts are well known, they are often selected, and both research and leadership suffer as a result. Second, youthfulness is only one of the "four transformations" in cadres. Some localities over-stress this factor, limiting the selection of county-level leaders to those under 45, including some "workers-peasants-soldiers" who have a low technical standard and are incompetent. On the other hand,

key members who graduated in the 1950's and '60's were not promoted, despite their technical expertise.

2) Even more noteworthy is the fact that organizational reforms have led to a proliferation of organizations and an increase in staff without a corresponding gain in efficiency. Take agriculture, for instance. Today, most counties and prefectures have such organizations as the agricultural bureau, forestry bureau, animal husbandry and special products bureau, commune and brigade enterprise bureau, agricultural machinery bureau, water conservancy bureau, meterological bureau, aquatic products bureau, and so on. Under these bureaus is an array of institutes, such as those in agricultural sciences, forestry, animal husbandry, aquatic products, agricultural machinery, tea leaves, horticulture and silkworms. Then there are companies and stations, such as those for seeds, fodder, crop protection and agricultural machinery, etc. Strictly speaking, these companies are enterprises and, as such, should be held responsible for their own losses and profits. In reality, however, they still operate like institutes when it comes to budgetary matters, treating operating expenses as personnel costs. As a result, their businesses have failed to take off. Everywhere we can find organizations which are over-stratified, over-staffed and inefficient. There are three mandarin orange research institutes in the suburbs of Yichang alone--the Yichang Prefectural Mandarin Orange Research Institute, the Yichang Mandarin Orange Research Institute, and the Yichang Mandarin Orange Research Institute. It is really unnecessary for one locality to have three research institutes.

People all feel that organizational reforms should aim at bringing together human, financial and material resources (facilities and equipment), which are now dispersed, and use them to good effect in key areas. Research institutes should foster a solidly academic environment where research workers should be the backbone, to be supplemented by a small number of managerial personnel and logistic service staff. By spending less on personnel and administration, institutes can devote more money to research. Instead of limiting research to crops and plants, they should pay more attention to husbandry, sideline production, fishery, agricultural produce processing, storage, transport, and management. Ideally, one area should have only one comprehensive research institute overseeing a variety of experimental stations each with their own specialties. Specialized research institutes should not be allowed to proliferate.

People everywhere also feel very strongly about the ignorance in science of the leaders at some research institutes and educational units, their willingness to master the subject, and their lack of a common language with scientific workers. It takes only one word from the secretary of an institute to throw out the decisions of its committee. The consensus is that this kind of leader should be transferred out to make room for knowledgable personnel in order to facilitate scientific development.

8. THE OPINIONS OF AGROTECHNICIANS IN THE LOCALITIES CONCERNING THE POPULARIZATION OF AGROTECHNOLOGY. These workers all believe that the present

system of popularizing agrotechnology is an extremely weak link. All over the country, numerous research achievements remain buried in research papers and reports. Even when the achievements are popularized, they fail to have as much impact as they should, due to the lack of a scientific management system. One example is the rapid degeneration of cross-bred improved varieties. The existing four-tier agricultural network no longer meets the needs of the new situation. It was geared toward the cadres of communes and brigades, whereas the new orientation must be towards the general public. The emphasis in the past was exclusively technical; now we must devote ourselves to the integration of agriculture, industry and commerce.

It is proposed that the potential human, material and financial resources for the popularization of agrotechnology be pooled to form a strong organization that incorporates teaching, scientific research and popularization. More concretely, the director of the agrotechnology popularization center under the Ministry of Agriculture, Animal Husbandry and Fisheries should be put in charge of the integrated management of agriculture, industry and commerce. This position should be held concurrently by a vice minister, while the current director of the center should be made deputy director to oversee the day-to-day affairs. The deputy directorship should be held concurrently by the president or vice president of the Chinese Academy of Agricultural Sciences, or the president or vice president of the Beijing Agricultural University. Each province or region should set up its own agency for agrotechnology popularization. The head of this agency and his deputy should be the vice governor with the agricultural portfolio, the director of the department of agriculture, the president of the provincial academy of agricultural sciences, or the president of the provincial agricultural college. Areas and counties should do likewise. We think that the teaching profession must engage in scientific research as well, otherwise there will be nothing to teach. Conversely, scientific researchers must teach in order to pass on their discoveries. Both educational and research workers must be involved in popularization to disseminate their research results among the public. In so doing they can also test the applicability and popularity of their research results. These activities, in turn, will breed new research ideas and topics, which would ultimately improve both teaching and research. In this way, educational, research and popularization personnel could be increased two-fold. three-in-one combination involving teaching, scientific research and popularization is a proven method in many foreign countries, particularly America. It has caught the attention of China's leadership but has yet to be put into practice. We propose that it be carried out on a trial basis in a province, prefecture, or county. Popularization should await the successful conclusion of this experiment.

9. IN DEVELOPING AGRICULTURE, INDUSTRY AND COMMERCE IN AN INTEGRATED WAY. WE MUST TAKE NOTE OF THE FOLLOWING ISSUES. For the first time, peasants nowadays are dressed adequately and need not worry where the next meal is going to come from. But to bring prosperity within their reach, we must make a concerted effort to diversity the economy and go all out to achieve the integration of agriculture, industry and commerce. Most of the

localities I visited emphasized crops and farming and paid insufficient attention to economic diversification, including rural enterprises. Right now, commune- and brigade-run enterprises have the following problems:

- 1) They are mismanaged and are operating at a loss. Many of them are still run in the "eating-from-the-same-big-rice-pot" way. Their expenses are huge, they have too many people on their payroll, including an excess of non-production workers, and they turn out inferior products. Their employees often borrow money from the enterprises but fail to repay them. Then there are entertaining and gifting at company expense. All this makes for a money-losing operation.
- 2) The enterprises are "under-fed". Take, for instance, the Yichang Tea Factory in Yichang Prefecture, maker of the famous "Yihong" tea which excels the "Qihong" tea produced in Qihong. In recent years, however, it has blindly built numerous commune and brigade tea plantations also to produce "Yihong." Bust since there are not enough raw materials, the factories could not work at full capacity.
- 3) Their products sell poorly. Ill-informed about the market, many localities produce blindly and end up making more merchandise than they can sell. Witness the glut in Anhui tea leaves, fuling and rabbit fur, and Jiangsu pearls, which has resulted in substantial losses.

To achieve the integrated management of agriculture, industry and commerce, and transform self-sufficient and semi self-sufficient production into commodity production, we must guide peasants to adapt to market needs, establish a commodity credit system, open up channels, and gradually expand the commodity exchange market. In addition, the scientific management of commune- and brigade-run enterprises and other co-operative sectors of the economy must be strengthened, and the "eating-from-the-same-big-rice-pot" method replaced by the responsibility system. Merit, not nepotism, should be the rule in the hiring of personnel. Product quality must be raised, costs cut and economic results emphasized.

10. THE DEVELOPMENT OF EXPERTISE. Wherever I went, I met technical workers who felt that their knowledge had become out-of-date and who were eager to take refresher courses. The localities could either invite experts and professors to come and conduct training courses, or send workers to other places on study tours or to undergo training. Batches of technical workers could be sent to school or scientific research organizations for a 2 to 3 month refresher course in a phased, systematic manner.

To provide training for senior technical personnel, provinces, prefectures and municipalities can invite foreign scholars to organize short-term lecture courses, to open up a channel for international academic exchange. In 1983, the Chinese Agronomy Society invited agricultural economists from Britain and the United States to give lectures at the Xibei and Huazhong agricultural colleges for agrotechnical personnel from all over the country.

The lectures were extremely well received. This method is preferable to sending people abroad in that it is more cost-effective and benefits more people.

Yang Jike [2799 4764 3784], vice governor of Anhui Province, has suggested that Anliu Prefecture start a Wanxi [Western Anhui] University. This suggestion has been welcome by the public. In order to achieve the four modernizations, I think all localities should create conditions necessary for the establishment of their own universities. They should start out with a two-year curriculum (both Japan and the United States have colleges offering such curricula), and gradually extend it to four years. In addition, they can offer short-term training courses. Some places, for example Xiangfan, have set up vocational universities. The science association in Wuhan is organizing a cadre training institute, which is a good way of developing expertise. In the future, all counties should create favorable circumstances that would make possible the setting up of a university to develop the expertise they need. The agrotechnical school run by Fengyang County, Anhui Province, now offers courses at both advanced and intermediate levels, the advanced curriculum lasting two years. Teaching is done by teachers from the Nanjing Agricultural College. This could be the beginning of a county-run university.

Today, many agricultural agencies at both the prefectural and county levels, science associations and agricultural societies offer courses either as in-serve training for cadres or to train peasants and cadres at the basic level in the rural areas. They have been very effective. It is hoped that this kind of training can be expanded.

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NORTHWEST REGION TACKLES GRAIN PROBLEM

OW211420 Beijing XINHUA in English 1247 GMT 21 Oct 84

[Text] Yinchuan, 21 Oct (XINHUA)—Most of the people in the poorest parts of northwest China are now producing more than enough food grain to support themselves.

Dingxi Prefecture in Gansu Province and the southwest part of the neighbouring Ningxia Hui Autonomous Region used to suffer from dire poverty because of serious soil erosion and drought.

The change in fortunes was reviewed recently at an agricultural development meeting called by the State Council in Yinchuan.

Since 1972, tens of millions of yuan of government grants have been appropriated a year to alleviate conditions, and at the end of 1982, the State Council decided to provide an additional 200 million yuan each year for 10 consecutive years.

The money is being used to cover the areas with trees and grass and develop animal husbandry.

General Secretary of the Chinese Communist Party Central Committee Hu Yaobang and Premier Zhao Ziyang have inspected the areas, and have helped local authorities work out development plans.

The state support has greatly aroused the enthusiasm of the local people to transform the areas and develop production, officials said at the recent meeting.

A mass campaign to plant trees and grass and build water conservancy projects has been launched.

Figures released at the meeting show that more than 565,000 hectares of land has been covered with trees and grass in the past two years.

Better harvests have been gathered and the annual grain harvest now averages 350 kilograms per capita as against 150 kilograms in the 1970s.

Fuel shortage was a major problem in the past when they burned stalks, animal dung and grass as fuel.

In recent years, the government has helped local people build pits to generate gas for cooking, and has supplied them with solar heated stoves and coal.

These can be used free of charge in exchange for a guarantee to cover a certain area with trees and grass.

The Gansu provincial government has used nearly 20 million yuan to help set up or expand 93 enterprises, including coal pits, cement works and building materials plants, as well as factories to process farm and side-line produce and livestock feed.

Total income of the township enterprises in Mulan County last year accounted for 42 percent of the country's gross industrial and agricultural output value.

Ningxia authorities have recently decided to turn a total of 133,300 hectares of sandy and alkaline wasteland in northern Ningxia into farmland for growing rice and other crops by using Yellow River water.

CSO: 4020/30

TYPHOON ALERT--The Central Meteorological Station issued a typhoon warning at 1800 hours [1000 GMT] on 6 November as follows: This year's typhoon No 18 took form in the western part of the Pacific Ocean on 1 November. The typhoon entered the South China Sea early this morning. At 1400 hours [0600 GMT] today, the center of the typhoon was located at 12.8 degrees north latitude and 115.9 degrees east longitude. Maximum winds at the center of the typhoon are of wind force 12. At present, the center of the typhoon is moving weat by north at a speed of about 30 kilometers per hour. It is estimated that the typhoon will continue to move in this direction and hit land in the coastal area of central Vietnam in the evening of 7 November. The following areas will be affected by the typhoon: During tonight and tomorrow, the northern part of the South China Sea will experience winds of force 6 to 7. The central and western parts of the South China Sea will experience strong winds of 8 to 11. In areas along the path of the typhoon, there will be strong winds of force 12. All units concerned: Please pay attention to weather forecasts by local meteorological stations. [Text] [Beijing Domestic Service in Mandarin 1200 GMT 6 Nov 84 OW]

FARM MACHINERY SALE--Hefei, 16 Aug (XINHUA)--Peasants in Huaiyuan County, Anhui Province, purchased more farm machines in the first half of this year than in the 29 years prior to the 3d Plenary Session of the 11th CPC Central Committee. The number of tractors owned by the county's peasants increased from 1,800 in 1978 to 16,100 in 1983. In the first 7 months of 1984, 2,011 tractors were sold to peasants in the country. With the increase in farm machinery, the country's grain output increased from 600 million jin in 1978 to 1.43 billion jin 1983. [Summary] [Beijing XINHUA Domestic Service in Chinese 0030 GMT 16 Aug 84 OW]

GUANTING RESERVOIR--Beijing, 23 Oct (XINHUA)--Guanting reservoir, a huge project north of Beijing has been quenching the city's thirsts and helping to protect it from flooding for 30 years, the BEIJING DAILY reports today. It has successfully contained seven major surges of floodwater along the Yong-ding River since it was completed in 1954. In the previous three decades, surrounding areas on the outskirts of Beijing had been flooded seven times. From 1955 to 1983, the reservoir, with a storage capacity of 2.25 billion cubic meters, supplied Beijing with 850 million cubic metes of water a year, irrigating 67,000 hectares of farmland. By the end of 1983, the three hydroelectric power stations built there and in its lower reaches had generated more than six billion kilowatt-hours of electricity. Guanting is the second largest of the more than 80 reservoirs built around Beijing. The largest is Miyun, situated northeast of the capital. [Text] [Beijing XINHUA in English 1228 GMT 23 Oct 84 OW]

CABBAGE 'DELUGE' PREPARATION--Beijing, 3 Nov (XINHUA)--Beijing will be deluged by about 400,000 tons of cabbages over the next few weeks, as authorities and families make preparations to store the city's main winter vegetable. Cabbage growing in surrounding rural areas is reported to have been good this year. The main cabbage lift is about the same as last year's, and supplies are ensured throughout the winter and spring. However, to encourage people to store more cabbage, vegetable shops now offer preferential prices, about 0.025 yuan (about 0.01 U.S. dollar) a catty for the top quality, to urban residents who buy their rationed supply. The municipal government called a meeting late last month to urge works and school canteens to store more cabbages. [Text] [Beijing XINHUA in English 1039 GMT 3 Nov 84 OW]

CSO: 4020/30

GRAIN SELF-SUFFICIENCY AS ECONOMIC ILL SEEN IN FUJIAN

Idea Refuted As Burden

Fuzhou RUJIAN RIBAO in Chinese 18 Jul 84 p 1

[Article by Lu Juyong [0712 1446 3057], secretary of the Ningde prefectural CPC committee: "Emphasis on 'Self-sufficiency in Grain' Brings About Vicious Circle, Resolutely Getting Rid of the Baggage Can Revitalize the Economy-A Discussion of Our Province's Strategy for Agricultural Development: Should Fujian Get Rid of the 'Self-sufficiency in Grain' Baggage?"]

[Text] Getting rid of the baggage of "self-sufficiency in grain" is a positive policy for revitalizing Fujian, and it has a great significance in developing Fujian's economy in the future in the quickest possible way.

For over 30 years, we have cherished this deep-rooted concept: "The whole party runs agriculture, the whole people keep a good grip on grain." Grain is the main political issue. It doesn't matter if other work does not move forward, we cannot consider our work accomplished if grain production fails. It is based on this concept that our daily routine is confined to a narrow circle, always thinking that "it is safe to emphasize grain and dangerous to put stress on cash." Our eyes are fixed on the 2.19 million mu of cultivated land but we pay no attention to the more than 13 million mu of hilly land, the 1.16 million mu of shallow water surface off shore and the 590,000 mu of tidal land. With this frame of mind, grain is emphasized day and night and year after year with the result that in spite of the tremendous efforts made and some development achieved in grain production, the question of having enough to eat and wear has remained basically unsolved. The reason is that diversified undertakings are not developed because grain production concentrates on one thing only. Having no cash on hand, the peasants have to use grain as cash, as a form of cheap commodity, to barter for things needed in production and livelihood and to defray expenses for weddings and funerals, thereby closing a vicious circle. Consequently, the question of having enough to eat and wear still exists in the barren hilly regions, and high-output grain areas have become high-output poor communes and teams. Grain scarcity commonly emerges in the hilly regions, the coastal areas and the major grain-producing and industrial crops areas every year when the new crop is still in the blade and the old stock has all been consumed. Cadres returning to the villages often heard appeals for relief grain and appeals to the state to sell the procured grain back to the places in need.

After the 3d Plenary Session of the 11th CPC Central Committee, we criticized and surmounted the "leftist" thinking and made efforts to develop diversified undertakings and the commodity economy. Thanks to the implementation of the agricultural production responsibility system, both grain production and diversified undertakings have developed and a new scene has appeared: "the granaries are fully stocked with grain, the jars are filled to the brim with wines, people are getting married, new houses are being built and more money is being put into the banks." Such a sight is drastically different from that in the past. This explains the truth that correct principles and policies can bring in a bumper harvest of grain and cash and also speed up the development of economic construction.

In getting rid of the baggage of "self-sufficiency in grain," it is necessary to check and reduce the quantity of grain subject to state purchases, implement the all-round contract system for grain production, relax the grainpurchasing and marketing policy and support the centralized use of funds earmarked for grain production. This is very important. In the past several years, we harped on the same theme about giving play to our province's advantages, developing the commodity economy in line with local conditions and putting forward tentative plans of building up production bases for diversified undertakings and the commodity economy, but all these plans were in the end baffled by the questions of how to achieve "self-sufficiency in grain," how to ensure the fulfillment of grain procurement and so forth. Many cadres at the grassroots level asked, in giving play to the advantages and developing commodity production, can the higher authorities reduce the quantity of grain subject to state purchases? Comrades at the county level are at a loss with regard to this question. Our area is also powerless to do anything because if the total grain procurement commitment remains unchanged, who will be assigned to undertake the tasks of areas affected by the reduction? While reducing the quantity of grain subject to state purchases in some areas, we should also make a corresponding reduction in those areas suitable for developing forestry, fishery and animal husbandry. In this way, it will promote the development of the construction of bases and the commodity economy as well.

There are two views about getting rid of the baggage of "self-sufficiency in grain" in our area. One is that the baggage should be cast away and measures adopted to accomplish the task, otherwise it will not work. The other view is concerned with what to do in the event of war when the transport of grain by sea is cut off. I am of the opinion that with regard to the first view, we should study it in relation to our work and map out practical and feasible measures to cope with the situation. As to the second view, I think the worry is unwarranted because (1) judging from the current international situation, a world war is unlikely in the near future, and we can take full advantage of this relatively stable favorable period to develop production, and (2) there is nothing to be afraid of even if war broke out because we can still go all out to concentrate on production. There is still time because grain production takes a short cycle that can be achieved in one season. There is a precedent to this situation. During the Civil War period, Chiang Kai-shek imposed an economic blockade on us by e.circling the Shaanxi-Gansu-Ningxia border region. Chairman Mao issued the Nanniwan call [Nanniwan is located in Shaanxi, where the 8th Route Army engaged in land reclamation in response to

this call--translator]. Through self-reliance, mple food and clothing were made available, thereby quickly smashing the enemy's blockade and further expanding our forces in the liberated areas.

Therefore we can completely dispel our misgivings and shed this "self-sufficiency in grain" burden.

'Self-sufficiency' Idea Endorsed

Fuzhou FUJIAN RIBAO in Chinese 18 Jul 84 p 1

[Article by Shen Yi [3038 5030]: "Is 'Self-sufficiency in Grain' Baggage?"]

[Text] I hold a different view toward the idea that Fujian should forever get rid of the "self-sufficiency in grain" baggage.

We should make a historical and realistic analysis of the question. In the past 30 years or so, Fujian did not give full play to its advantages nor did it enliven its economy. Its agricultural structure was irrational and the peasants did not become well-to-do. We should not attribute all our problems to the evil consequences brought about by the "because" of "self-sufficiency in grain."

Should we compute the need for grain in our province at 800 or 1,000 jin per person from now on? Computing on the basis of 500 jin per person, by the year 2000, when the population of our province is expected to reach 31.7 million, we will need approximately more than 25 billion jin of grain. Since our grain output last year totaled only 17.2 billion jin, we have to increase our grain output by more than 500 million jin every year from now on. In spite of the tremendous efforts we put in over the past 30 years, we managed to increase 320 million jin of grain annually. Now the per-mu grain output is more than triple that of 1949. However, cultivated land acreage may diminish in the future, and without a major scientific and technological breakthrough, we will still have to exert greater efforts to realize a faster growth than in the past. Thus, how can we refrain from talking about self-sufficiency in grain and also about relaxing grain production?

I think it is necessary and feasible to readjust the tentative plan adequately regarding the overall arrangement of grain and industrial crops and the importation of some grain as a corresponding measure to developing Fujian's economy. However, it seems not too appropriate to list it as a "tentative strategic plan". Furthermore, the slogan of "getting rid of the baggage of 'self-sufficiency in grain'" and the principle of "resolutely not relaxing grain production and actively developing diversified undertakings" are not consistent with each other and may produce side effects if not carried out properly.

Solution for 'Self-sufficiency'

Fuzhou FUJIAN RIBAO in Chinese 18 Jul 84 p 1

[Article by Lu Zifen [7120 5261 1164], secretary of the Miamen city CPC committee: "A Cardinal Matter Beneficial to the Country and the People"]

[Text] The consequences brought about by the bassage of "self-sufficiency in grain" came to light as early as in the 1970's but it did not attract the people's attention significantly due to the historical conditions at that time.

I am for getting rid of the baggage. As long as we get rid of the baggage and set our policies right, we do not have to worry about food. The purchase of grain above the state procurement quota is not gaing on natively at the moment and the problem of "having difficulties in selling rain" has come up. We should take resolute measures to purchase this portion of grain (Xiamen should consume this portion of grain) so as not to dampen the peasants' enthusiasm. At the same time, we must acquaint ourselves with the general situation, readjust the overall arrangement of crops step by step, do our work in line with economic results and prepare well the work of constaint grain shipped in from other places. The issue here is not who is willing or unwilling to do this or that but to take positive steps to do a good job that is beneficial to the country and the people.

12662

FUJIAN ADOPTS PROGRAM TO BUILD EIGHT BASES

OW240343 Buzhou FUJIAN RIBAO in Chinese 6 Oct 84 p 1

["Program of Fujian Province for Building Eight Bases for Trial Implementation Adopted in Principle by the Ninth Session of the Standing Committee of the Sixth Provincial People's Congress on 29 September 1984"--FUJIAN RIBAO head-line]

[Excerpts] To read the "Mountain and Sea Classic" [geography book showing reliance on resources] well and build the eight bases (for forestry, animal husbandry, fishery, industrial crops, light industry, foreign trade, science and education, and reunification of the motherland) was a strategic concept put forward by the Fujiang Provincial CPC Committee in 1981 on the basis of the actual conditions in the province. This constitutes an important aspect in fostering strengths and circumventing weaknesses, in bringing into full play the potential predominance of developing resources in mountainous and coastal areas and in running Overseas Chinese affairs in the province, and in making more contributions to the whole country. This also constitutes an important bridge to link the two sides of the Taiwan Strait and help the reunification of the motherland. To build the eight bases well is a major event affecting the fundamental interests of the people in the province.

I. Base for Forestry

Fujian has only little over 19 million mu of arable land, but its hilly areas are about seven times that. To regard building the forestry base as the main task and make diversified use of the hilly areas is an important aspect in reading the "Mountain and Sea Classic" well. It is necessary to make overall plans; develop bamboo, tea, fruits and other forestry sideline production on the basis of the local conditions; actively stimulate the lumber industry; and put lumber to diversified uses. Our goal for struggle in building the forestry base before the turn of the century is as follows:

We should accelerate afforestation and tree nurseries, expand afforested areas, raise the percentage of forest land, and maintain an ecological balance. The afforested area should be increased from 67.45 million mu in 1980 to 100 million mu. The percentage of land covered with trees should be increased from 39.5 percent in 1980 to 60 percent. It is essential to improve forestry management and ensure that forests can be used in a continuous manner. The total lumber reserve should be increased from 430 million cubic meters in

1980 to over 600 million cubic meters, and the output of lumber should reach 15 million cubic meters.

We should fulfill the goal of quadrupling the output value of forestry production. Efforts must be made to lay a good foundation to achieve the aforementioned strategic goal before 1990.

II. Base for Animal Husbandry

Fujian is abundant in water plants. It has about 30 million mu of hilly areas, mountain slopes, and various tracts of grass-covered including more than 8 million mu of mountainous areas where grass grows briskly. These natural conditions are conducive to raising fowl and draft animals and to growing fodder crops. The province has a great potential in developing animal husbandry. Efforts must be made to attach importance to animal husbandry development and to help agriculture, forestry, and animal husbandry promote each other.

Our goal for struggle in building the base for animal husbandry before the turn of the century is as follows:

The total meat output should be increased by 300 percent and the total output of dairy products and eggs increased by 10 times as compared with the 1980 figures. It is necessary to distinctly increase these pastoral products on a per capita basis.

Forests must be made to fulfill the goal of quadrupling the output value of animal husbandry production.

It is essential to lay a good foundation to achieve the aforementioned strategic goal by 1990.

III. Base for Fishery

Fujian has a vast water area, with fishing grounds as large as its total land area. In addition, it has vast areas of shoals, ponds, reservoirs, and lakes with abundant aquatic resources and great potential in developing fishery.

Our goal for struggle in building the base for fishery before the turn of the century is as follows:

We should unequivocally protect, rationally utilize, and actively develop resources in coastal waters, vigorously promote fish breeding, and work hard to exploit the aquatic resources in deep seas. The output of aquatic products should be tripled as compared with that of 1980. Efficiency must be improved in keeping aquatic products fresh, in processing and packing them, and in making diversified use of such products. The output value of aquatic products should be quadrupled as compared with that of 1980 and the goal of increasing production and revenues and of further developing fish breeding be achieved.

IV. Base for Industrial Crops

Fujian has a good climate, suitable for cultivating sub-tropical and tropical industrial crops. The province has a great variety of, and abundant, resources. Many of its products of rare and precious strains are unique, selling well in China, and well-known at home and abroad. We should systematically readjust the agricultural economic structure, bring into full play Fujian's overall superiority in natural conditions, economy and technology, give priority to the development of sugarcane, fruit, tea, cured tobacco, rubber, flowers, sericulture, medicinal herbs, vegetable and spices, and turn Fujian into a production base for industrial crops and commodities geared to the needs of both the Chinese and international markets.

The objective of building the base for industrial crops is to give full play to favorable conditions, readjust crop patterns, speed up development, and bring the ratio between the industrial crops growing area and the area of grain and other crops up to 30:70 from the 1980 ratio of 15:85 by the end of the century.

V. Base for Light Industry

Fulian should accelerate construction of a base for light industry, because it has such favorable conditions as abundant natural resources, a good geographic posit on, and good transportation facilities, and it has laid an initial industrial foundation. Priority should be given to the following 5 respects: 1) to develop the food processing industry, with stress on sugar, cannel food, salt, cigarettes and beverages; 2) to expand production of textile goods, with emphasis on chemical fibers, knitted goods, silk, woolen textiles, and garments; 3) to develop production of consumer goods, fine chemical products, and industrial products with distinctive local features, with emphasis on electric appliances for household use, fine porcelain, chemicals for daily use, plastic products, and handicraft articles; 4) to accelerate development of cultural goods, with emphasis on development of television sets, video recorders, radio and cassette recorders, duplicating machines, and cameras; and 5) to develop new electronic products and electro-mechanical products, such as microcomputers, computer software, and digital instruments and meters.

VI. Base for Foreign Economic Relations and Trade

Fullar has a long history of foreign trade. The transport service between its constal areas and the outside world is good. The province is the home of many overseas Chinese. In view of its historical background and its present needs, Fujian should turn itself into an important base for foreign economic relations and trade.

The aim of our efforts to build the base for foreign economic relations and trade is to turn the Xiamen Special Economic Zone, and the Fuzhou Economic and Technical Development Zone into important bases for China to import advanced technologies, develop foreign economic exchanges, and promote international banking by the end of the century. Xiamen and Fuzhou should

serve as the windows, showing China's technological level, management knowledge, and foreign policy. Xiamen, Fuzhou, and Quanzhou should become major ports, forming a foreign trade network.

VII. Base for Science and Education

The modernization of science and technology is the key to accomplishment of the four modernizations. In order to accelerate Fujian's economic construction, we should rely on science and technology, and on development of intellectual resources. We must use intelligence to win. Science and education should meet the needs of economic construction and anticipate the needs of the four modernizations.

Scientific research, education, and production should be closely integrated and should promote each other. Scientific research should try hard to catch up with others at the advanced level. We should pay attention to new technologies, and to popularization of science. We should increase investment in the development of intellectual resources, and effectively train, select, hire, and place various qualified personnel for economic construction, particularly high-level specialized personnel. We should run well a number of key provincial colleges and turn them into Fujian's education and scientific research centers. We should seriously do a good job in developing universal education, and actively develop vocational and sparetime education.

VIII. Base for the Reumification of the Motherland

Fujian and Taiwan are only separated by a strip of water. Fujian is the ancestral home of the compatriots in Taiwan. With profound feelings of kinship, the people of the two provinces share the same dialect and customs. Their relations are extremely close. Our province should become the main bridge in maintaining direct contacts between the people on the mainland and the people in Taiwan, and make even greater contributions to the peaceful re-unification of the motherland.

The target in building the eight bases is a magnificent one, and the task is a clear-cut one. However, it will be arduous to fulfill such a goal. Only by keeping the future in mind and putting ourselves on firm ground at present, will it be possible for us to fulfill this goal. The governments at all levels, and the departments concerned, must firmly implement various construction plans and measures; and organize the people and cadres throughout the province to earnestly study and implement all such plans and measures, clearly delegate all responsibilities, closely coordinate with both the higher and lower levels, support one another, work with one heart and one mind, consciously strive to fulfill the goal of building the bases and help Fujian become a pacesetter in developing the four modernizations program in the whole country.

REGULATIONS ISSUED ON TURNING ARABLE LAND INTO FORESTS

HK170350 Lanzhou Gansu Provincial Service in Mandarin 1100 GMT 13 Oct 84

[Text] With a view — d protecting vegetation and speeding up the development of the mountainous areas in southern Gansu, at the recent conference on commodity production in the mountainous areas in southern Gansu, the provincial government discussed and formulated tentative regulations on turning arable land into forestry centers and forests. It demanded: People's governments at all levels in the mountainous areas in southern Gansu must seriously implement the regulations.

The tentative regulations provide: In light of the new situation, it is necessary to gradually turn steep slopes of more than 25 degrees, particularly more than 30 degrees, into forestry centers and forests. The state must provide appropriate subsidies. Whoever plants them will own them. They can manage these forestry centers and forests for a long time and these forestry centers and forests can be inherited. In 1985, the mountainous areas in southern Gansu will initially make arrangements for turning 220,000 mu of arable land into forestry centers and forests and, in coordination with the township government and the forest committee, the county government will carry out the annual plan tor turning arable land into forestry centers and forests.

The tentative regulations also provide: It is strictly prohibited to reclaim land from steep slopes of more than 25 degrees. Offenders shall be punished. If one reclaims 1 fen of a steep slope, 1 fen of one's contract land will be recovered. In serious cases, offenders will be punished in accordance with the law. We must take such measures as are suitable to local conditions to link planting trees with growing grass; to link growing grass and planting trees with breeding livestock; to link forestry, livestock, and sideline production with forestry, livestock, and native products processing; and to link economic results with ecological results.

AGRICULTURE MANAGEMENT COURSE--Lanzhou, 1 Nov (XINHUA)--As China's peasants move from self-sufficiency towards a commodity economy, 60,000 peasants in Gansu Province are taking broadcast courses. The one-year spare-time courses are sponsored by the provincial committee of the Chinese Communist Party and the provincial government. The students are middle school graduates, exservicemen, and people engaged in specialized production. Twenty-seven courses on basic management theory, applied technology, processing of agricultrual and side-line products and poultry farming are given by more than 40 specialists from the provincial agricultural college and the agricultural academy of science. Students are coached by 700 local teachers. The Gansu provincial authorities plan to train all 1.3 million peasants in the province with some schooling. [Text] [Beijing XINHUA in English 0724 GMT 1 Nov 84 0W]

CSO: 4020/30

YAO WENXU ATTENDS HAINAN RURAL WORK CONFERENCE

HK170750 Haikou Hainan Island Service in Mandarin 0330 GMT 14 Oct 84

[Text] According to Han Zhizhong, special correspondent of this service, the Hainan CPC Committee held a rural work conference between 9 and 13 October to arrange work for this winter and next spring, requiring all localities in the region to continue to implement Central Committee Document No 1 of 1984 on grasping farming, animal breeding, processing, and circulation in a big way, setting up an economic system with all-round development of agriculture, forestry, animal husbandry, sideline production, and fishery, and the comprehensive management of agriculture, industry, and commerce, and advancing toward an opening-type agriculture.

Regional CPC Committee Secretary Yao Wenxu and Deputy Secretary Wei Zefang attended the conference and made speeches.

Since the beginning of this year, the rural situation in the region has continued to develop. Agricultural production this year will reap another all-round bumper harvest on the basis of the wide-ranging increases for 4 successive years. More and more peasants have left their land to engage in industry and commerce. An unprecentedly excellent situation has emerged in the rural commodity economy. The conference has required all localities to grasp well the following items of work during this winter and next spring:

- 1. It is necessary to further implement the six-character policy: Farming, animal breeding, processing and circulation, and to sum up and popularize typical experiences, using the experiences of selected units to promote work in the entire area. The peasants are allowed to do whatever they can to become rich within the limit of policies, and they are not to be bound by conventional ideas.
- 2. It is necessary to do a good job in readjusting the structure of agricultural production. On the basis of continuing to do a good job in grain production, it is necessary to actively develop diversified management, and to shift the focus of rural development to industry and commerce, so as to create conditions for the all-round development of agriculture, forestry, animal husbandry, sideline production, and fishery, and the economic system of the comprehensive management of agriculture, industry, and commerce. It is necessary to implement the combination of agriculture and trade, and to advance toward an open-type agriculture.

- 3. It is imperative to grasp well the popularizing and planting of hybrid rice. Practice over the past few years has proved that hybrid rice is a high yielding variety, and the popularizing of which will not only increase the output of grain, but will also improve the peasant's skill in farming. In popularizing hybrid rice, it is necessary to do a good job in organizing the supply of seed, and to ensure the rate of sprouting of the seed.
- 4. It is necessary to bring about an upsurge in building water conservancy facilities in the winter and to bring into full play the efficiency of the existing water conservancy facilities, so as to ensure the irrigation needs in planting the early rice crop next year. In reference to the building of water conservancy facilities this winter, it is necessary to grasp maintenance and make a complete set on the one hand, and to grasp management on the other, and to implement the contracted responsibility system. It is necessary to concentrate leadership, time, and labor, and to work hard to fulfill the task.

HOUSEHOLD WORKSHOPS—Guangzhou, 26 Oct (XINHUA)—More than 300,000 household workshops have sprung up in the countryside of Guangdong Province since the responsibility system was introduced in 1979, according to local authorities. The workshops make plastics, costumes, textiles, castings and hardware, process food, and produce tiles, wood and bamboo articles. They are staffed by peasants in slack seasons. Guangdong has 9.51 million peasant households. In more developed districts, half the rural labor force is involved in household industries. Each family earns an average of 500 yuan a month from its sideline. A decision made by the provincial government earlier this year allows individuals to import from Hong Kong and Macao machinery worth less than 20,000 yuan for private use. Township industrial offices provide local peasants with market information and technical advice. [Text] [Beijing XIN-HUA in English 0903 GMT 26 Oct 84 OW]

CSO: 4020/30

GUANGXI SUGARCANE HARVEST--Nanning, 27 Oct (XINHUA)--Guangxi Zhuang Autonomous Region reaped a bumper harvest of hong pi [4767 4122 red skin] sugarcane this year. Total harvest of the sugarcane was I billion jin, 50 percent more than last year. This year, the autonomous region planted hong pi sugarcane on 100,000 mu of land, 20,000 mu more than last year. Before harvesting, supply and marketing departments and individually run transportation and marketing households of the autonomous region signed agreements with customers of some provinces and cities of northern China on the purchase of 200 million jin of sugarcane. Currently, sugarcane is being shipped to Beijing, Tianjin, Shanghai, Shijianzhuang, and Zhengzhou. [Summary] Beijing XINHUA Domestic Service in Chinese 0018 GMT 27 Oct 84 0m]

GUIZHOU MODIFIES GRAIN PROCUREMENT POLICY

HK250632 Guiyang Guizhou Provincial Service in Mandarin 2300 GMT 24 Oct 84

[Text] In light of the actual situation in grain production and consumption in our province, the provincial people's government recently decided to modify the grain procurement policy in the rural areas. The provincial government announced that from this year's autumn grain procurement season onward, 11 poor counties, namely, Hezhang, Zhijin, Nayong, Weining, Puding, Yanhe, Sandu, Luodian, Ceheng, Leishan, and Danzhai, will be completely exempted from the list of grain procurement and extra procurement quotas. Also, other counties apart from these counties will be required to fuflill only the rice procurement quota. Corn, wheat, and soybeans, which were covered by the command procurement plan in the past, will be procured instead by the grain department according to the prices fixed by the provincial government on a voluntary basis. As far as the procurement of corn, wheat, and soybeans are concerned, department will not be allowed to refuse to procure or limit the quantity of procurement as long as these crops are up to the quality standards set by the state. Crops other than the above are to be procured at negotiated prices according to market demand. The grain market will be opened to the state, the collective, as well as individuals throughout the year.

Medification of the grain policy toward the rural areas introduced by the provincial government will free the peasants from, or substantially lighten, their burden regarding the grain procurement quota. This will provide a material basis and the favorable conditions for readjusting the agricultural structure of the province, implementing the policy of planting trees and grass instead of crops on steep slopes and the strategy of developing animal husbandry formulated by the provincial CPC Committee, and speeding up the development of town and township enterprises.

STATE-RUN FARMS EXEMPTED FROM GRAIN PROCUREMENT QUOTA

HK291142 Guiyang Guizhou Provincial Service in Mandarin 2300 GMT 27 Oct 84

[Text] From this autumn grain procurement season onward, all agricultural, forestry, animal husbandry, and tea farms at various levels in our province which undertake the task of quota and above-quota grain procurement will be exempted from the task of grain procurement. As for public grain, cash will be paid to the state in lieu of tax paid in kind. This decision has been made by the grain authorities of the province in accordance with the situation of grain production in our province and the spirit of the relevant instructions of the central authorities and the provincial authorities.

The provincial Grain Bureau has issued a circular to various localities. The circular states: Grain departments at all levels should support and encourage the state-run agricultural, forestry, animal husbandry, and tea farms to use their self-produced grain in developing animal breeding and food processing so as to increase the quantity of commodity supplies in the market and enrich and satisfy the needs in daily life of the people in the cities and rural areas. In addition, the circular stipulates that after the exemption of the grain procurement quota task, if the state-run agricultural, forestry, animal husbandry and tea farms earnestly want to sell their surplus grain to the state, so long as the quality of their grain is up to the standards set by the state, the grain departments must purchase the grain in accordance with the currently stipulated comprehensive price and procurement price. Refusal to purchase the grain is not allowed.

GUIZHOU SETTING UP FAMILY FARMS IN STATE FARMS

HK230637 Guiyang Guizhou Provincial Service in Mandarin 2300 CMT 22 Oct 84

[Text] From 13 to 30 October, the provincial work conference on state farms in the agricultural system was held in Guyang. The conference relayed the spirit of the national conference on the work of agriculture and reclamation which was held in September this year, and discussed in detail the problem of running family famrs in an all-round way in state farms so as to quicken the pace of reforms.

The conference held: Since the 3d Plenary Session of the 11th CPC Central Committee, and especially since the beginning of last year, 247 family farms have been set up in the state farms of our province, and initiative in production of the staff and workers has been markedly raised, with the output value prominently enhanced. In order to popularize the successful experience of these family farms, the conference proposed: This winter and next spring, the active running of family farms should be regarded as the breakthrough point in the work of the state farms. The mode of official-run farms should be thoroughly changed, and the present situation of eating from the same big pot should be fundamentally changed, so that the pace of reform in state farms can be quickened.

The conference pointed out: In order to meet the requirements of family farms, the state farms should relax controls, delegate power, and streamline their administration and, through the reduction of personnel in administration and management, lighten the burden on the workers in farms. The family farms should be allowed to enjoy both power and benefits. All the state farms should act according to reality, and transform their administration offices into operational and service units. It is necessary to assist the family farms in mapping out their plans for production, and to provide them with services before, during, and after production, and with technology, funds, means of production, transportation, and so on.

CONFERENCE ON AGRICULTURE, INDUSTRY

HK150600 Guiyang Gizhou Provincial Service in Mandarin 2300 CMT 10 Oct 84

[Excerpts] Last night [10 October] the Guizhou Provinicial CPC Committee and government convened a provincial telephone conference, urging all localities to take prompt action and adopt measures so as to strive to fulfill the plan of planting rapeseed on 5.5 million mu of land this autumn so that rapeseed production can be considerably increased next year. The telephone conference also called on all localities and departments and the leaders and masses of enterprises to work hard in the fourth quarter of the year so as to strive to fulfill the target of more than 7 billion yuan in total industrial output value this year and make good preparations for next year's production.

Vice Governor Zhang Yuhuan presided over the telephone conference. Vice Governor Zhou Yansong and Qiao Xueheng, director of the Agriculture Work Department of the provincial CPC committee, delivered a speech. The telephone conference pointed out that rapeseed is a strong point of our province. Great efforts should be exerted to grasp rapeseed production so as to strive to achieve production of 900 million jin of rapeseed next year. In order to ensure the fulfillment of the plan, the provincial CPC committee and government require all localities to grasp the opportunity to do a good job in the following work:

- 1. Active propaganda work should be carried out in the countryside to propagate the significance of planting rapeseed and the policy concerning the purchase of rapeseed so as to fully mobilize the initiative of the peasants in planting rapeseed.
- 2. All localities should organize forces to carry out inspection on the conditions for fulfilling the planting plan.
- 3. It is necessary to speed up the pace of fall harvesting.
- 4. All professions and trades should actively support fall planting and strive to do all services well. The agriculture department should strengthen the work of popularizing technology and the transfer and coordination of good species.

The telephone conference summed up and analyzed the situation in industrial production this year. The conference called on all localities and departments and the leaders and masses of enterprises to work hard in the fourth quarter of the year so as to strive to fulfill the target of more than 7 billion yuan in total industrial output value this year and create conditions for good work in the first quarter of next year.

The conference pointed out: The situation in industry since the beginning of this year is good. From January to September 75.5 percent of the planned annual target had been fulfilled, exceeding the rate specified in the plan and recording an increase of 15.1 percent compared with the same period last year.

In the fourth quarter, it is necessary to grasp the following measures:

- 1. The leadership should be strengthened and sentiments toward relaxation should be overcome.
- 2. All targets for the fourth quarter should be practically assessed and implemented and vigorous measures should be adopted to ensure their fulfillment.
- 3. Unified direction and coordination in production should be strengthened.
- 4. Efforts should be exerted to grasp consolidation and reform of enterprises continuously so as to promote the continuous development of production. Transfers should be made regarding those factory directors who are incompetent, and no toleration and accommodation should be allowed.
- 5. Technological transformation should be grasped continuously.
- 6. Maintenance and repair work should be actively grasped for all production equipment.
- 7. It is necessary to set up and perfect the economic responsibility system. Those who fulfill their tasks well should be rewarded, and those with outstanding contributions should be substantially rewarded. Economic means should be utilized to punish those who fail to accomplish their tasks. Furthermore, all districts and units should make good preparations for production in the first quarter. Plans should be made in advance and tasks should be fixed beforehand to strive to gain good results in the first quarter of next year.

CIRCULAR PROHIBITS WITHHOLDING CASH--The provincial Grain Bureau recently issued a circular, prohibiting people from taking the opportunity to withhold cash from peasants in the course of settling accounts for grain procured. To ensure that in the course of grain procurement, peasants and grain specialized households promptly get all the money due in cash for the grain sold or grain sold above their grain procurement quotas, the circular issued by the provincial grain bureau points out: Responsible comrades of grain departments at all levels must organize personnel concerned to seriously study the instructions and regulations sent down by the central and provincial authorities on the prohibition concerning withholding money from other units in the course of settling accounts for grain procured, and must generally inspect whether or not money was withheld in the course of settling accounts for summer grain and oil-bearing crops procured. The circular also states: In future, when accounts are settled for grain and oil-bearing crops procured, grain departments must justly and forcefully rebuke those who violate this circular. [Text] [Guiyang Guizhou Provincial Service in Mandarin 2300 GMT 14 Ort 84 HK]

CSO: 4907/58

GRAIN HARVEST--Harbin, 18 Oct (XINHUA)--Heilongjiang Province's grain harvest this year is expected to reach a record 35 billion jin, an increase of 4 billion jin over the good harvest year of 1983. [Excerpt] [Beijing XINHUA Domestic Service in Chinese U857 GMT 18 Oct 84 OW]

SUPPLY, MARKETING COOPERATIVES--At present, Heilong iang Province has some 12,000 supply and marketing cooperations, 10 times that of the early period of new China, and 120,000 staff and workers, 12 times that of the early period of the PRC. Up to the present, some 3 million peasant households have bought shares, accounting for 78 percent of the total number of share holders. [Summary] [Harbin HEILONGJIANG RIBAO in Chinese 30 Sep 84 SK]

FARM MACHINERY BIDDING OPENED -- Beijing, 26 Oct (XINHUA) -- Bids for the supply of farm machinery for a land reclamation project in Heilongjiang Province were opened in public here this worning. Representatives of nine firms and manufacturers from Italy, the Federal Republic of Germany, Canada and the United States attended the bid opening ceremony conducted by the China National Technical Import Corporation. The project is financed by a World Bank loan equivalent to 80 million U.S. dollars. First bids for the project were in August last year. This time they are mainly for purchase of 100 self-propelled combine harvesters, 80 swathers, 100 cutting platforms and 100 pick-up platforms. Evaluation of the bids will start soon and contracts are expected to be awarded in December, according to the National Technical Import Corporation. Present at the bid opening ceremony were representatives from the ministries of foreign economic relations and trade, finance, justice, and agriculture, animal husbandry and fisheries, the China Council for the promotion of international trade and the Bank of China. [lext] [Bei]ing XINHUA in English 1229 GMT 26 Oct 84 OW

CSO: 4020/30

XI ZHONGXUN WRITES LETTER TO VILLAGE IN HENAN PROVINCE

HK311238 Zhengzhou Henan Provincial Service in Mandarin 1030 GMT 30 Oct 84

[Text] On 20 September, party branch cadres and the masses of (Baxi) Village of Chengguan Township in Changge County wrote a letter to Comrade Xi Zhongxun, member of the CPC Central Committee Secretariat, who instituted investigations and studies in this village 25 years ago, briefing him on the changes of the village.

Recently Comrade Xi Zhongxun wrote a letter in reply, congratulating the cadres and masses in (Baxi) Village on their achievements. He also encouraged them to make efforts to scale new heights on the path of modernizing agriculture. The following is the full text of Comrade Xi Zhongxun's letter in reply:

Comrades of the party branch and all cadres of (Baxi) Village in Chengguan Township, care of the Changge County CPC Committee;

I am very glad to read your letter dated 20 September. What I saw and heard 25 years ago when I was instituting investigations and studies in Changge County are still fresh in my mind. At that time your village was turned from a rich production brigade where everything was in good condition into a miserably poor production brigade. We reported this real situation to the central authorities.

Nowadays, under the guidance of the line, guiding principle, and policy adopted by the 3d Plenary Session of the 11th CPC Central Committee, and promoted by the reform of economic system in the rural areas, your village has taken on an altogether new look. You have now embarked on the broad road of casting off poverty and becoming rich. In the meantime, you have made great achievements in the building of socialist spiritual civilization. I sincerely convey my warm congratulations and affectionate greetings to your.

Today, the 3d Plenary Session of the 12th CPC Central Committee has successfully concluded. This is another important session following the 3d Plenary Session of the 11th CPC Central Committee. The session has adopted a decision on the reform of economic system. I hope you will conscientiously

study and comprehend the decision of the plenary session, and implement it in a creative way in light of your practical conditions. In addition, I also hope that you will stick to the ideological line of seeking truth from facts to continue to eliminate leftist ideological influences, thoroughly negate the Great Cultural Revolution, strengthen party spirit, overcome factionalism, end estrangement, unit. As one, and make efforts to scale new heights on the path of casting off poverty, becoming rich and modernizing agriculture.

[Signed] Xi Zhongxun Beijing, 20 October 1984

WHEAT SOWING--All places in Henan Province have stepped up autumn harvesting and the sowing of wheat. By 12 October, the province had drained off water on the larger part of over 10 million mu of farmland and had sown wheat on some 8 million mu. [Summary] [Zhengzhou Henan Provincial Service in Mandarin 1030 GMT 14 Oct 84 HK]

FLOODS, PEST DAMAGE TO WHEAT--According to HENAN RIBAO, from 6 to 16 October, Vice Governor Hu Tingji led responsible persons of the provincial rural development research center and the provincial department of agriculture and animal husbandry, as well as some professional personnel, to Xinxiang, Xinyang, Anyang, Jiaozuo, Luoyang, Pingdingshan, Nanyang, Zhumadian, and other prefectures and cities and to more than 10 counties and townships to solve problems concerning wheat sowing through investigation and study. Comrade Hu Tingji said: The situation in wheat sowing in many places in our province is good, but large acreages of areas have been flooded and stricken by pest damage because of heavy rains in September. Meanwhile, some cadres and masses are slack in their work and the rate of progress in sowing is not consistent. [Excerpts] [Zhengzhou Henan Provincial Service in Mandarin 2300 GMT 17 Oct 84 HK]

HUBEI

BRIEFS

GRAIN PROCUREMENT--By the end of October, Hubei Province had procured some 7.66 billion jin of grain, an increase of some 2.14 billion jin over last year. Peasants have received some 100 million yuan for above-quota procurement. With the approval of the State Council, in May this year the province put into effect the method of pricing grain procured. The method is that of all grain, regardless of the amount, sold by peasants, 30 percent is calculated and paid to the peasants at the state monopolized procurement price and 70 percent is calculated and paid to peasants at the above-quota procurement price. [Summary] [Wuhan Hubei Provincial Service in Mandarin 1100 GMT 2 Nov 84 HK]

PEASANTS TO MAKE OWN PRODUCTION PLANS

HK230841 Changsha Hunan Provincial Service in Mandarin 1100 GMT 21 Oct 84

[Text] On 15 October, Vice Governor Cao Wenju, talking to the directors of agriculture bureaus at the prefectural and city levels, proposed: From now on, the peasants of our province should be allowed to make their own arrangements and production plans in accordance with market demand as well as their own specialized skills. Vice Governor Cao Wenju held: The state reforms the system of planning, and practices planning guidance on the production of the principal agricultural products, which is in conformity with the reality of development of the rural economy in our province. He said: In the past, we emphasized the planting of grain one-sidedly, and the peasants carried out production according to order. As a result, the product type was unitary and the commodity rate was very low. At present, we are carrying out rational readjustment of the economic structure in rural areas and of the production structure. The peasants are allowed to use 5 to 10 percent of their grain farmland for diversified operations, and 40 percent of the surplus manpower is allowed to engage in various trades in agriculture, industry, and commerce. In this process, an important element is respect for the decisionmaking power in production of the peasants. With regard to the types of products and the arrangements for the farmland, they should be given a free hand to make their own decisions, and we should only strengthen our guidance, without giving commands.

Vice Governor Cao Wenju also demanded that leading comrades at various levels and the economic functional departments should do their best to adapt themselves to the reform and resolutely give up the past practice of administrative and directive methods such as urging peasants to do farming or planting work, unified purchase, and exclusive sales. In addition, an all-round system to popularize agricultural science and technology and a sensitive information system should be actively established, so as to make use of forecasts of market conditions, to utilize various kinds of information to guide the peasants to develop commodity production in accordance with the demands of society, and to use the role of the economic levers to overcome blindness in commodity production as far as possible.

TRUCK SHORTAGE PLAGUES FARMERS

Beijing CHINA DAILY in English 23 Oct 84 p 1

[Text]

NANJING — More motor vehicles are needed in the country-side to move produce to city markets, a noted sociologist said.

Fei Xiaotong, vice-chairman of the Chinese People's Consultative Conference (CPPCC), said the transportation problem has become a major stumbling block in the continued development of the country's rural economy.

Fei, who recently concluded a

survey in rural Jiangsu Province, said many counties sought without success to buy motor vehicles from the Nanjing Automotive Factory. Each county had made immediate requests for 490 trucks. But the factory agreed to sell only a few dozen trucks to counties whose needs were most urgent.

According to Fei, tons of food and fruit were left to decay in the villages around Xuzhou Prefecture because farmers could not find vehicles to ship them to the cities Garlic, a famous Jiangsu product,

was in great demand in city markets but failed to arrive in sufficient quantities because of a lack of transportation.

In some counties, slow and oilconsuming tractors have been the only means of rural transportation

Many farmers came to Nanjing prepared to offer thousands of yuan in cash to buy trucks, but they were turned away by apologetic factory managers.

Fei said the Nanjing Automotive Factory was hampered by a shortage of raw materials and rigid procedures in selling to farmers.

However, according to a new decision by the central government, the State will turn out more than 60,000 motor vehicles for the rural market before the end of the first quarter next year.

This is the first time that the State will earmark a large number of motor vehicles for farmers.

The vehicles will go to Shandong, Hebei, Henan, and Sichuan provinces where individual farmers savings have increased rapidly in recent years.

At the same time, the State will provide more motor vehicles to Ningxia, Qinghai and Gansu where transportation problems have severely plagued farmers.

In order to move the motor vehicles more quickly, material supply departments at the county level will handle the sales to farmers.

CORN EXPORTS—The state had assigned Jilin Province the task of exporting 5 billion jin of corn to other provinces from October last year to September this year. As of 25 September, the province had exported 5.075 billion jin of corn to other provinces. [Summary] [Changchun Jilin Provincial Service in Mandarin 1030 GMT 27 Sep 84 SK]

LIAONING

BRIEFS

TUSSAH COCOON PRODUCTION--Liaoning Province's annual tussah cocoon output averaged 900,000 dan during the past 6 years, an increase of 3.6 times over the 195,000 dan in 1949. [Excerpt] [Shenyang Liaoning Provincial Service in Mandarin 1030 CMT 2 Oct 84 SK]

EFFORTS URGED TO SOLVE DIFFICULTY IN MARKETING

SK150917 Hohhot Nei Monggol Regional Service in Mandarin 1100 CMT 13 Oct 84

[Text] On the evening of 13 October, the regional CPC committee and government held a telephone conference on rural and pastoral work. It stressed that solving the problem of peasants and herdsmen in selling their products should be regarded as an important task of autumn work and be carried out in a down-to-earth manner.

Tian Congming, standing committee member and secretary general of the regional CPC committee, presided over the conference. Oian Fenyong, deputy secretary of the regional CPC committee, and Bai Junqing, vice chairman of the regional government, spoke at the conference. Attending were responsible comrades of various leagues, cities, banners, and counties, and leading comrades of pertinent regional departments and bureaus.

Comrade Bai Junqing cited and analyzed the region's remarkable achievements in the development of livestock breeding, farming, forestry, and township enterprises scored this year. He pointed out: A new development in commodity production in rural and pastoral areas is a prominent indicator of our region's excellent situation this year. A problem in marketing, however, has arisen. Whether or not we can properly solve the difficulty of peasants and herdsmen in selling their products has a direct bearing on our ability to protect their production enthusiasm and develop the excellent situation that we have already created.

Comrade Bai Junqing said that there are four reasons for the difficulty in marketing. He said: First, most of the rural and pastoral areas of our region are of rather high longitude with inconvenient transport facilities and slow information access. Second, their ability to process and store products is poor and their products lack a competitive edge. Third, some comrades still do not attach importance to circulation links. Fourth, although we have reformed our circulation system to a certain extent, many obstacles still exist.

In order to change the aforementioned situation, Comrade Bai Junqing, on behalf of the Nei Monggol Regional CPC Committee and Government, set forth the following specific demands on party and government leading organs at all levels:

First, leading persons should personally organize special groups to market stockpiled farm and animal by-products. Leading persons should acquire an understanding of their local stockpiled goods and send persons to other places to find markets and sign contracts. Comrades of departments concerned should be organized to engage in selling and those who do a good job should be rewarded.

Second, attention should be paid to transport facilities. All transport forces should be organized to open up circulation channels. We should encourage peasants and herdsmen to raise funds to build roads, and support the masses buying means of transport to develop specialized transport-sale and procurement households. In the meantime, we should encourage transport forces and transport-sale personnel of other places to serve as our liaison men.

Third, we should develop township enterprises to process and produce farm and animal by-products.

Fourth, we should do a good job in market construction to make village fairs flourish.

Fifth, we should do a good job in the storage of farm and animal products.

The conference called on all localities to achieve concrete results before the end of October.

Qian Fenyong, deputy secretary of the Nei Monggol Regional CPC Committee, stressed at the conference: The current change from self-sufficient and semiself-sufficient economy to fairly large-scale commodity production in our region is an important transition, and also a stage of fundamental importance in deciding whether economic work can continue to develop. All CPC committees and the government should suit their methods of work and thought to the needs of the new situation, and conscientiously help peasants and herdsmen solve their difficulty in marketing, and invigorate commodity circulation channels.

LI XUEZHI ON MAKING MOUNTAIN AREAS RICH

HK160419 Yinchuan NINGXIA RIBAO in Chinese 21 Sep 84 pp 1, 3

[Report: "Investigations Made by Li Xuezhi in Eight Counties in Southern Ningxia--Pointing Out: Massive Grass and Tree Planting, Development of Animal Husbandry and Rural Enterprises, and Expansion of Diversified Areas of Management Repr-sent the Basic Ways of Making the Southern Mountain Areas Rich"]

[Text] From 30 August until 8 September Comrade Li Xuezhi, party secretary of the autonomous region, carried out investigations and research in eight counties in southern Ningxia, namely Yanchi, Tongxin, Haiyuan, Xiji, Longde, Jingyuan, Guyuan, and Pengyang. He got close to the grassroots rural brigades and visited 15 villages, more than 30 specialized households, and 5 small town and village enterprises, as well as 3 forestry centers. He paid special attention to investigating the situation in regard to Comrade Hu Yaobang's directive to plant grass and trees and to the implementation of this year's central authorities' document No 1. He held forums and discussions with leaders from all levels and listened to many reports. He pointed out that the basic ways in which the southern mountain areas can change from being poor to being rich are by continuing to eradicate "leftist" influences, further relaxing policies, planting grass and trees in large quantities, developing animal husbandry, opening up new areas and possibilities in management, and developing rural and small-town enterprises and commodity production.

Over this last year party and government organizations at all levels in the southern mountain areas have been studiously implementing Comrade Hu Yaobang's directive concerning the planting of grass and trees and the spirit of the central authorities' document No 1 for this year. They have firmly implemented the regional party committee's principle for construction, referred to as "massive planting of grass and trees, developing animal husbandry and promoting agriculture, suiting policies to local conditions, and developing agriculture, forestry, animal husbandry, fishery, and sideline industries in a comprehensive way." In doing this work they have achieved great successes. There have been encouraging new changes in the situation in the southern mountain areas, which for so long were characterized by poverty and backwardness in natural conditions, economic development, and the spirit of the local people. This year total grain production for these eight counties in the area is estimated to exceed 850 million jin, making it the best year ever

for grain harvests. Grass and tree planting tasks have been completed and targets have been overfulfilled by more than 200 percent and the scale and speed of such planting have seldome been seen since the liberation. There has also been new development in the animal husbandry industry. By August of this year gross industrial output value had increased by 17 percent over that for the same period last year. There has already been a healthy start to moving away from a vicious cycle to benign cycle in the southern mountain areas.

Grass and Tree Planting Is Still the Top Priority

These investigations began in Yanchi and then moved on to Tongxin, and afterward to Guyuan and the mountain areas. Although it was already fall, what greeted the eye along the roadsides was no longer massive expanses of yellow sand and bare hills, but instead a lush panorama of natural greenery and vegetation. When grass and tree planting activities were investigated in Shabianzi in Yanchi, Nanhuashan in Haiyuan, Yueliangshan in Xiji, Guojia Hougou in Longde, and Shanghuang in Guyuan, Comrade Li Xuezhi found shurbs, grass, and trees all growing as high as a man, while purple clover and Sudan grass covered the ancient plains, and thus he turned happily to the rural and village cadres accompanying him and said: The changes in the southern mountain areas illustrate that Comrade Hu Yaoboang's directive concerning the planting of grass and trees has entered your hearts and there has been massive improvement in the understanding and awareness of the masses and the cadres and it seems as if the idea of "playing the pi-pa wrongly" has now changed and the results are very evident. He went on to stress that we can on no account be complacent or slacken in our work and that we can only rest easy when we have stood the test of long-term massive droughts, and thus we should still make grass and tree planting top priority, for only in this way can we quickly change the ecology and poverty of the Xiji, Haiyuan, and Guyuan areas. He went on to say that grass and tree planting in the mountain areas requires a further relaxation of policies and that at present the ideologies of some of the cadres are still fettered by the influences of "leftism" and thus they tend to stick to old ways and are very apprehensive. As a result there is still a lot of "eating from the same big pot" in some forestry centers and people tend to live far too egalitarian lives. Successful reforms are being carried out centered around the household contract responsibility system and Comrade Li felt that the forestry centers must also set up household or individual contract systems. Policies must be carried out and there must be a clear clarification of rights, duties, and interests, and a mobilization of enthusiasm.

After investigating the harnessing of the river in the Yuan He valley by the Shutai commune of Haiyuan County, Comrade Li Xuezhi pointed out that the harnessing of the river represents foundation work for agriculture in the mountain region. He said that we must studiously assess our experiences and actively promote a system of responsibility to look after and maintain the river valley land and water and that we should adopt the system of household contracts, and integrate biological and engineering measures to tackle the situation. He said that we must make use of policies to encourage the peasants to develop and make green the barren mountains and slopes.

Develop Animal Husbandry and Increase Peasant Incomes

In Silidun township in Yanchi County, Comrade Li Xuezhi listened carefully to the introductions and experiences related to him concerning their policy of fixing livestock numbers according to the amount of grass available, their readjustments of the makeup of livestock, and their implementation of the "three highs and one fast," all of which have promoted the development of animal husbandry. After listening he gave their work a high appraisal. He said that it is necessary to control the occurrence of "excessive cutting and too many livestock," but this does not mean that we should not develop the animal husbandry industry, or reduce it. "Fixing livestock numbers according to the amount of grass available" is a good policy and the word "fixing" should not be seen in a negative sense. It is vital that the relation between grass and tree planting and the development of animal husbandry be correctly handled and there should be stable development through the integration of long-term social results and short-term economic results. Both artificial and natural livestock fodder should be utilized and livestock numbers should be expanded. When discussin with the mountain area cadres the problem of how to make the peasants rich, he said that we must exploit our natural resources, raise funds, and organize jointly managed undertakings, linking the state, the collective, and the individual and in particular encouraging individual peasants to organize the generation of electricity. Today the Jingguangwu brigade has 23 households equipped with the "5 electrics," (electric lights, electric rice cookers, electric kettles, electric woks, and electric blankets) and thus is taking the lead in quickly solving the energy problem in the mountain areas. He asked the relevant authorities to help collectives and individuals to organize the generation of electricity with the implementation of feasibility studies and to also provide support in terms of funds, technology, and equipment.

Actively Open the Door to the Outside and Enliven Circulation

The responsible comrade for the Guyuan area party committee gave a report on how the Guyuan area had established friendly contacts with Shaoxing in Zhejiang and how, as a result of visits and discussions, 28 coordination projects have been agreed upon. Li Xuezhi pointed out that opening up to the outside means two things. On the one hand it means opening up to other countries and on the other it means opening up to other provinces and cities. Recently, friendly area and urban relations have been established between Yinchuan and Ningbo, between Shizhuishan and Bengbu, between Yinnan area and Jinhua area, and between Yongning County and Zhejiang's Xiaoshan County. Increased economic links, technological coordination, and personnel exchange with coastal areas is extremely significant in promoting economic development in the southern mountain areas which have been poor for so long. Comrade Li said that in friendly exchanges with outside towns and provinces it is vital that we study and make use of our advantages and play down our shortcomings, stressing our reputation, respecting all contracts, and working for mutual benefit and mutual prosperity.

During the investigations Comrade Li Xuezhi constantly reminded everyone that crop output in the southern mountain areas is good and that the area

has livestock products, medical raw materials, and the "four beans" (potatoes, broad beans, peace, and lentils), as well as other economic crops and fruits. Thus the potential for the development of commodity production is enormous. However, he went on, some cadres and some of the masses lack sufficient understanding and appreciation of the need to develop commodity production; they are moving too slowly and are not exploring all production possibilities and hence the proportion of commodity production is very small. He said that the various kinds of specialized households are the representatives of the advanced productive forces in the villages and that attention must be paid to giving expression to their role. Thus we must develop local processing of such sideline agricultural products as fodder, food, and starch while the relevant departments should provide technological guidance and economic information for these specialized households. The state and the collectives can get to grips with the food-canning and grape sugar-processing industries, thereby transforming the rich local superiority in natural resources into commercial superiority. Thus, by means of the spheres of circulation, this may be transformed into economic superiority and thus constantly increase the peasants' income.

In response to the feeling among cadres in all areas that communications and transportation were not satisfactory, information was bad, and circulation poor, Comrade Li Xuezhi said that the development of commodity production requires the further opening up of channels of circulation. Good circulation does not depend merely on commercial supplies and marketing, it also requires massive development of transportation and sales on the part of the specialized households. What should be done where there are enormous numbers of products? If you do not buy them, then I will go out myself and look for markets wherever I can. The villages are filled with capable people with an ear to the ground and the ability to organize management, and full use should be made of them. Enlivening circulation means improving communications and transportation and thus importance must be attached to road construction in the mountain areas, so as to invigorate urban and rural markets.

Respect Talent and Implement Polices for Intellectuals

During their discussions with Comrade Li, party and government cadres in all areas said, displaying a great deal of understanding, that of all the problems and difficulties in the southern mountain areas, the greatest difficulty of all was the lack of talented people and the backwardness of technology. Comrade Li Xuezhi pointed out that over the previous few years there had been a drain of intellectuals from the southern mountain areas and that the reasons for this were manifold, but the main one was a problem of policy. Economic competition is in reality competition for and among talented people. We must without fail create a social atmosphere in which knowledge, intellectuals, and talented people and personnel are respected and we must steadfastly implement all policies for intellectuals, suitably improving the life and treatment of intellectuals in poor areas and commending and rewarding those intellectuals who make outstanding contributions. We must also pay attention to fostering and training local talent and offering favorable conditions and pay in order to attract talented people, personnel, technology from outside.

In view of the lack of cadres who understand economics and industry among the leading groups at all levels in the suthern mountain areas, Comrade Li Xuezhi requested that the relevant departments immediately begin selecting cadres from among industrial and mining enterprises who correspond to the conditions of being more revolutionary younger in average age, more professionally competent, and better educated, and that these cadres be placed as quickly as possible into leading groups in all areas and counties. He also said that all grassroots enterprises, forestry centers, and technological propagation units must organize themselves by making use of intellectuals with relevant knowledge as their leaders.

Energetically Encourage the Practice of Conducting Investigations and Studies

Cadres of all areas, and in particular grassroots cadres, underlined the serious problem of "the mountain of documents and sea of meetings." Comrade Li said that this problem was a chronic diseas and that it simply must be overcome. Cadres at all levels are servants of the people and they work for the people. Hence they must change their work style, enter deeply into reality, and investigate and research, getting to grips with situations at first hand, studying new things, accumulating new experiences, and solving new problems. It will not do for them to become embroiled in "a mountain of documents and a sea of meetings." Only by carrying out in-depth investigations and research can truth truly be sought from facts, otherwise we will see only bureaucracy and this will blind our leadership. Recently Comrade Hu Yaobang said that investigations and research are the best way to study. Our leading cadres at all levels should spend one-fourth of their time every year in carrying out investigations and research. He said that it had been proposed that leading cadres above autonomous region office or bureau level should spend 1 month of the remaining 3 and 1/2 months of this year walking around, looking, and writing one or two model investigation reports. Cadres who regularly go deep into the grass roots to carry out investigations and research in order to solve actual problems should be commended and rewarded. Cadres who make especially large contributions should receive awards or should be promoted.

NATIONAL MEETING ON AQUATIC PRODUCTS CALLED

OW290832 Beijing XINHUA in English 0651 GMT 29 Oct 84

[Text] Jinan, 29 Oct (XINHUA)--China harvested 2.5 million tons of aquatic products in 1983, an increase of 50 percent over 1979, according to figures released at a national meeting on shoal shellfish farming held recently in Wendeng County on Shandong peninsula.

The meeting was called by the Ministry of Agriculture, Animal Husbandry and Fisheries.

The officials present at the meeting attributed the success to the flexible polices adopted in recent yers, which have encouraged individual fishermen to open up new areas for cultivation of fish, shrimps, shellfish, algae, etc.

There are now 220,000 hectares of shoals and coastal waters used for cultivation of aquatic products, as against only about 116,700 hectares in 1979. The varieties of products increased from a dozen to more than 30 in the same period.

Shoals have been contracted out to inviduals, and now over 134,000 house-holds are specializing in marine farming or participating in associations for aquatic product cultivation. At present the output of marine products by the specialized households and associations in Fujian Province accounted for 60 percent of the provincial total. The acreage of shoals for cultivation of shellfish and laver managed by individuals in Zhejiang Province accounted for more than 90 percent of the provincial total.

Scientific and research departments have also made contributions to the development of aquatic products by breeding prawns and some types of shell-fish by artificial means.

CSO: 4020/30

AGRICULTURAL PRODUCTS--Over the past 35 years, the output of agricultural products has increased rapidly in Shandong Province. In 1949, the province produced 17.4 billion jin of grain, 1.62 million dan of cotton, 11.11 million dan of oil-bearing seeds, 64,000 tons of pork, mutton and beef, 500 million jin of fruits and 581,000 dan of leaf tobacco. In 1978, the province produced 45.76 billion jin of grain, 3.082 million dan of cotton, 19.188 million dan of oil-bearing seeds, 522,000 tons of pork, mutton and beef, 3.053 billion jin of fruits, and 3.726 million dan of leaf tobacco. In 1983, the province produced 54 billion jin of grain, 24.5 million dan of cotton, 30.39 million dan of oil-bearing seeds, 945,000 tons of pork, mutton and beef, 4.237 billion jin of fruits, and 4.421 million dan of leaf tobacco. [Text] [Jinan DAZHONG RIBAO in Chinese 18 Sep 84 p 1 SK]

WHEAT SOWING--As of the end of October, rural areas in Shandong Province successfully fulfilled the task of sowing 64.7 million mu of wheat, some 5 million mu more than that in the past year, and the highest figure for the past 30 years. Now, more than 60 million mu of wheat seedlings have emerged, and most of them are growing well. [Text] [Jinan Shandong Provincial Service in Mandarin 2300 GMT 1 Nov 84 SK]

FORESTRY CONSTRUCTION—Since the founding of the PRC, Shandong Province has scored tremendous achievements in forestry construction. Now the wooded areas total 21.84 million mu, a 4-fold increase over 1949; the trees planted around houses and long rivers, roads, and ditches number 1.38 billion, 10.2 times that of 1949; and the forest cover has increased from 1.9 percent in 1949 to 9.5 percent. The provincial storage of forest and timber has now reached 32 million cubic meters, and the annual timber output has topped 1 million cubic meters. At present, the number of state—run nurseries has increased from 10 with a total area of 3,771 mu in 1949 ti 154 with a total area of 51,000 mu. The number of state forest farms has increased from 37 with a total area of 580,000 mu in 1949 to 145 with a total area of 2.52 million mu. [Summary] [Jinan DAZHONG RIBAO in Chinese [remainder missing]

FARMLAND IMPROVEMENT PROJECTS--Over the past 35 years, Shandong Province has built more than 60 water conservancy works, increased irrigated farmland to 68 million mu, prevented 31,300 square km of land from erosion, and treated 8.75 million mu of saline-alkali land. In 1983, the province suffered a serious drought which afflicted 71 percent of its farmland. However, thanks to the irrigation works which provided 16.6 billion cubic meters of water, the province reaped 54 billion jin of grain, an all-time record. [Summary] [Jinan DAZHONG RIBAO in Chinese 11 Sep 84 p 1 SK]

MUNICIPAL LEADERS ATTEND AFFORESTATION MEETING

OW310319 Beijing XINHUA Domestic Service in Chinese 1145 GMT 29 Oct 84

[By reporters Zhu Weixin and Shao Jianwu]

[Text] Beijing, 29 Oct (XINHUA)—In order to further promote greening work in cities, the Central Greening Committee organized responsible persons of departments concerned of Beijing, Tianjin, and Shanghai municipalities to visit and inspect each other's greening work from 10 to 29 October.

Beijing municipality has promoted greening work in urban areas in a solid manner after receiving the four-point instruction from the Secretariat of the CPC Central Committee. In the past 3 years, 508 additional hectares of land have been planted with trees. This year, in order to greet the 35th anniversary of the founding of the People's Republic of China, Beijing Municipality has taken a firm grip on greeing work. The municipal leadership has concentrated forces to plant trees along the 100-li main street from the capital airport to Shijingshan, along the Beihucheng River and the Liangma River, along 15 roads, and in the 10 public parks. The tree-planting added new color to the national day celebration.

Tianjin municipality has paid attention to planting trees in small parks, gardens, and scenic spots and along main streets. This year, more trees have been planted along the 4 main streets and in 26 residential areas. A number of families have also planted trees.

Shanghai municipality has planted trees on all available land because few places are left for afforestation. Many units have planted trees on available land and built rooftop gardens. This year, Shanghai municipality has paid particular attention to building the Dianshan Lake area and the Forest Park.

The visiting and inspecting groups held a discussion meeting in Beijing today to sum up their experiences. Leading comrades of departments concerned and Beijing municipality, including Yang Zhong, Li Ximing Wang Bin, Lian Zhong, Ma Yuhuai, and Feng Mingwei attended the discussion meeting. Based on a suggestion made by the Shanghai Municipal Greening Committee, an agreement was signed by the representatives of Beijing's Shijingshan District, Tianjin's Hongqiao District, and Shanghai's Yangpu District on cooperation in greening work. The three districts' representatives pledged to strengthen cooperation, learn from and support each other, and speed up the pace of greening work in the municipalities.

FORESTRY ACHIEVEMENTS.—Shanxi Province's forest areas increased from 5.51 million mu in the early period of China to the present 24 million mu, of which the area of artificial forests increased from 190,000 mu to 8.26 million mu, showing an increase of 42 times. The number of trees planted around houses and along rivers, roads, and ditches increased from the original 15 million to 560 million, up 36 times. The amount of timber reserves increased from the original 10.37 million cubic meters to 42 million cubic meters, up 3 times. The percentage of forest covered land rose from 2.4 to 10.27. [Text] [Tiayuan SHANXI RIBAO in Chinese 30 Sep 84 p 1 SK]

FARM MACHINES, TRACTORS--Since the third plenary session, peasants in Shanxi Province have raised some 800 million yuan bo buy more than 50,000 farm machines and tractors, double the number of farm machines in use in the province before 1978. As of the early period of 1984, more than 100,000 peasant households in the province had tractors and more than 50,000 households used machines in their processing industry. [Summary] [Taiyuan SHANXI RIBAO in Chinese 30 Sep 84 p 1 SK]

SICHUAN ISSUES SUPPLEMENTARY STIPULATIONS TO BOOST RURAL ECONOMY

HK291234 Chengdu Sichuan Provincial Service in Mandarin 2300 GMT 26 Oct 84

[Text] In order to implement the stipulations set out by the State Council concerning individual industry and commerce in rural areas, recently the provincial government, taking into consideration the practical situation of economic development in the rural areas of our province, has set out some supplementary stipulations so as to facilitate the development of individual industry and agriculture in rural areas, promote rural commodity production, and enliven the material exchanges between cities and rural areas.

The supplementary stipulations require that various localities should act in accordance with Document No 1 of 1984 of the central authorities and certain regulations of the State Council on individual industry and commerce in rural areas, in association with the conditions of local resources and economic and technological conditions, and should continue to relax the scope of management and registration. With regard to the scope of operations for individual industry and commerce in rural areas, the supplementary stipulations demand that flexibility and specific treatment should be practiced according to the development of the economy and the needs of society. The stipulations also set out some concrete arrangements concerning the scope of registration and management as well as the scope of business.

With regard to such problems as procedures in registration, approval of the scope of business, methods of operations, and so on, SICHUAN RIBAO will introduce the details on the above in a column of questions and answers on policies in accordance with the spirit of the relevant documents.

GOVERNMENT URGES IMPLEMENTING LAW ON FORESTS

HK301218 Urumqi Xinjiang Regional Service in Mandarin 1300 GMT 28 Oct 84

[Text] On 23 October, the regional people's government issued a circular demanding that the law on forests of the PRC be conscientiously studied, publicized, and implemented.

The circular pointed out: Xinjiang is situated in the interior of the Eurasian continent, and there is a high degree of drought, sand blown by the wind, and salinization; the natural ecology is very weak. Therefore, it is of a still greater strategic significance to implement the law on forests. The law on forests will become effective on 1 January 1985. At present it is necessary to make various kinds of preparations. It is necessary to seriously study and propagate the law on forests. The leading organs at all levels should mobilize and organize the masses to study the basic content and spirit of the law on forests. The newspapers, radios, and mass media should be mobilized to give publicity to the law on forests, the protection of forests, and the development of the forestry industry, as well as the important role of these in building the socialist modernization.

Various localities should relay the law on forests to the grassroots levels and the broad masses level by level, so that every household and every person can have a good understanding of the law on forests.

With regard to cases of forest fires and the destruction of forests in recent days, the relevant departments should speed up their investigations and deal with the cases seriously. In particular, it is necessary to adopt measures to prevent further wanton felling of trees and wanton capturing and killing of wild animals. At present efforts should be made to do a good job in gathering seeds for autumn afforestation, in planning the second stage of building the (Sanben) windbreak forest, and in grasping the economic reform of the forestry industry so as to strive to open up a new situation in the forestry industry of our region.

LI JIAYU INSPECTS SOUTHERN URUMQI AREA

HK220622 Urumqi Xinjiang Regional Service in Mandarin 1300 GMT 16 Oct 84

[Text] On 12 October Li Jiayu, secretary of the regional CPC committee, inspected the south suburban area of Urumqi County. He said: When developing the southern suburb, we must take animal husbandry and the breeding industry as the breakthrough point and strive to help the 50,000-odd peasants and herdsmen attain prosperity.

The southern suburb of Urumqi County has favorable conditions for developing animal husbandry and the breeding industry. However, due to various reasons, the area has long remained poor. Last year its per-capita income was just 117 yuan. In order to put an end to this situation in the area, Urumqi County in August established a committee for work in southern suburb, which has decided to develop and build the southern suburb.

After listening to reports by the southern suburb's leading comrades and workers, Comrade Li Jiayu said: The southern suburb area must seriously act in the spirit of the regional forum on animal husbandry work; further relax policies; and actively help the specialized households and economic associations greatly develop animal husbandry. On production procedures, both peasants and herdsmen must make concerted efforts to grow grass and trees and to raise livestock so as to provide on a large scale to the state such commodities as meat, milk, and eggs. In addition, through the development of animal husbandry, we shall promote the great development of agriculture, tourism, the processing industry, as well as town and township enterprises.

In (Shuizhigong) town, in the southern suburb of the country, Comrade Li Jiayu visited the home of (Cun Lizhen), a household specializing in raising rabbits. He asked him about his experience in increasing the number of rabbits from five to more than 360, and how he has earned more than 53,000 yuan in 18 months. He encouraged him to seriously sum up his experiences in raising rabbits and to gradually popularize it. In particular, he told him to help the herdsmen in nearby brigades develop the speciality of raising rabbits and to become a model in promoting nationality unity.

FORUM HELD ON DOUBLING AGRICULTURAL OUTPUT

HK291218 Kunming Yunnan Provincial Service in Mandarin 2300 GMT 27 Oct 84

[Text] The provincial forum on doubling agricultural output convened by the provincial CPC committee and the provincial government, which lasted for 8 days, came to an end on 27 October in Kunming. Leading comrades of the Yunnan Provincial CPC Committee, the provincial people's congress standing committee, and the provincial people's government Pu Chaozhu, Liang Lin, Wang Lianbang, Dao Guodong, and Li Dongyou attended the forum. Governor Pu Chaozhu spoke at the forum.

During the forum the responsible persons from various prefectures and cities and from the relevant departments directly under the provincial authorities, as well as the responsible persons of the 22 counties and cities which have achieved relatively great advances in agriculture in recent years, conscientiously studied the speeches by the central leading comrades on problems of agriculture and the talk given by Governor Pu Chaozhu, summed up and exchanged experiences in efforts to double output, rich, and in develop commodity production [as received], and, in connection with reality, analyzed and studied the new situation and new problems in the rural areas which have occurred under the new situation. They also discussed measures in grasping reforms, promoting the doubling of output, and realizing the objective of enriching the people and revitalizing the country. Furthermore, the forum also studied the implementation of the spirit of the circular of the central authorities in helping the poor areas to change their situation as soon as possible.

Everyone present at the forum reflected that the present forum has not adhered to the habit of speaking in outmoded terms and expressions; its content has been rich, its guiding ideology clear, and thus it embodies the spirit of reform. Great positive results have been achieved. The responsible comrades from various places stated that at present the situation in the rural areas is excellent. Reform is still developing continuously. We should have a clear understanding of the new situation, study new conditions, and solve new problems. We should continue to enhance our level of leadership so as to work and endeavor in a down-to-earth manner for the realization of the grade objective set out by the 12th Plenary Session and for the realization, as soon as possible, of achieving the doubling of our agricultural output value. Vice Governor Li Dongyou spoke at the conclusion of the forum.

GOVERNOR DISCUSSES CHANGES IN RURAL WORK SYSTEM

HK270625 Kunming Yunnan Provincial Service in Mandarin 2300 GMT 25 Oct 84

[Excerpts] Pu Chaozhu, deputy secretary of the provincial CPC committee and governor, delivered a speech at the provincial forum held on 24 October on quadrupling the province's agricultural output value. He spoke on readjusting and establishing a new rural industrial structure, as well as the focal point of rural work development this winter and next spring.

On the new situation emerging in the rural areas, Comrade Pu Chaozhu said: In the wake of changes caused by the increase in agricultural production, the situation of the rural areas has been changed in five ways: the structure of manpower, industry, consumption, circulation, and agricultural technology. Collectively, the changes in these five areas are called changes in the economic structure of agriculture.

He pointed out: At present we can sum up the problems emerging in the rural areas as follows: We have limited ways to attain prosperity, though we stress achieving our goals. We are bound by too many conventions, though we ant to develop production trades. We only possess low levels of technology, though we want to develop new products. We do not have clear circulation channels for the goods made. The leadership does nto conform to the situation and is not skillful enough.

Comrade Pu Chaozhu said: In connection with these new circumstances and new problems, we must clarify the guiding ideology for the rural work. To quadruple the agricultural output value we must firmly grasp the crux of reforming the economic structure of agriculture, which focuses on readjusting the industrial structure. Eventually, reform of the agricultural economic structure still depends on policy and science. Through policy, we can mobilize the initiative of peasants and open up new paths for proudction and development of new industries. We must continue to eliminate the leftist influence, as well as overcome such deficiencies as vying for profits between the urban and rural areas and between official and civilian bodies, having too many conventions, and exercising too rigid controls. Under the guidance of the state plans, we should adopt a relaxed attitude in this respect, so that peasants can attain prosperity at an earlier time. We should develop new industries and new products by importing and popularizing science and technology.

Meanwhile, we must give guidance to consumers in order to invigorate the circulation channels and to improve the marketability of products. We must strengthen our study, improve our level of leadership, and try our best to conform to the new situation of development in the rural areas. In other words, we must develop new things in various areas but must guard against outdated things and deficiencies.

On readjusting and establishing the new rural industrial structure, Comrade Pu Chaozhu said: The reform of the rural economic structure will result in a transfer of the labor force and will create new industries. It is another important rural policy in line with implementing the system of contracted responsibilities on a household basis with payment linked to output, as well as a major issue with strategic significance.

Comrade Pu Chaozhu pointed out: Proceeding from the reality of the province, our present major tasks in reforming the rural industrial structure are to continue to readjust the internal structure of farming while still grasping grain production, to grasp firmly the development of the rural food processing and fodder industries, to promote changes in grain production in these two areas, to further develop the timber processing industry and further invigorate the circulation channels, to make a major breakthrough in the mining industry, to greatly develop the building materials and building industries, to greatly develop the power industry for rural collectives, to run more town and township enterprises, to import and recruit technicians, and to organize a rational mobilization of manpower. Leadership at various levels must strengthen its study, rectify its guiding ideology for vocational work, and pay attention to studying the new situation and solving new problems.

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FORUM ON QUADRUPLING AGRICULTURAL OUTPUT VALUE

HK220510 Kunming Yunnan Provincial Service in Mandarin 1100 GMT 21 Oct 84

[Text] The problems of eliminating leftist influences, complacency, carrying out reforms, making regulations less restrictive, revitalizing the domestic economy, quadrupling output value, and of becaring rich were the main topics discussed at the provincial forum on quadrupling the agricultural output value held in Kunming yesterday. The forum was held by the provincial CPC committee and the provincial people's government. The forum will discuss and study the new situation and new problems that have come up under the new circumstances and the new methods for solving these problems in order to discharge the central tasks of carrying out reforms, quadrupling the output value, and to attain the goal of making people rich and the country strong. The focus of the reforms is reform of the product mix. Reform of product mix roughly refers to the restructuring of the internal organization of agriculture, the restructuring of agriculture, forestry, animal husbandry, and fishery, and the restructuring of joint agricultural-industrial-commercial operations. The reform of product mix is aimed at giving impetus to the overall reform of agricultural and at speeding up the development of commodity production in the province.

The forum will also study and implement, on the basis of the actual circumstances in our province, the spirit of the central authorities' instructions on helping poverty-stricken areas to change their features as soon as possible.

More than 150 people, including the responsible commides of 22 counties and cities which as a result of their rather rapid agricultural development, will quadruple their output value in the next 2 to 3 years, the responsible commades of the province's prefectures, autonomous prefectures, and cities, and the responsible commades of the provincial departments concerned, attended the forum.

COCOON HARVEST--Hangzhou, 5 Nov (XINHUA)--Zhejiang Province, one of China's key production areas for silkworm cocoon, has reaped a bumper silkworm cocoon harvest this year. A total of 1.216 million dan of silkworm cocoons has been purchased for the spring, summer, and autumn seasons of this year, prefulfilling the annual purchase plan and showing an increase of 101,000 dan over the same period last year. It is expected that the total purchase amount this year will exceed the record year of 1982. [Summary] [Beijing XINHUA Domestic Service in Chinese 0017 GMT 5 Nov 84 0W]

JAPANESE AGRICULTURAL DELEGATION--The Zhejiang Provincial Agricultural Department sponsored a welcoming ceremony this morning for a 10-member agricultural delegation from Zhizuoka Prefecture, Japan. The delegation is headed by (Shuji Sano) and (Fumio Harada), respectively director and chief technicians of the Shizuoka Prefecture Department of Agriculture and Aquatic Products. During the ceremony, (Sun Wanping), director of the Zhejiang Provincial Agricultural Department, delivered a welcoming speech and briefed the Japanese guests on Zhejiang's agricultural situation; various branches and offices of the department briefed the Japanese guests on production and marketing of agricultural products, as well as ontheir organizations. As the end of the ceremony, the hosts and their guests posed for apicture to mark the occasion. The Shizuoka Prefecture agricultural delegation arrived in Hanzhou last evening. Members of the delegation will make a 10-day study tour in Hangzhou, Huangyan, Xinchang and Tiantai. [Text] [Fingzhou Zhejiang Provincial Service in Mandarin 0400 GMT 23 Oct 84 OW]

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